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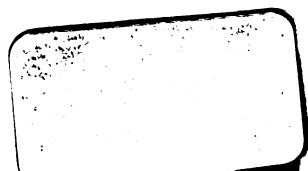
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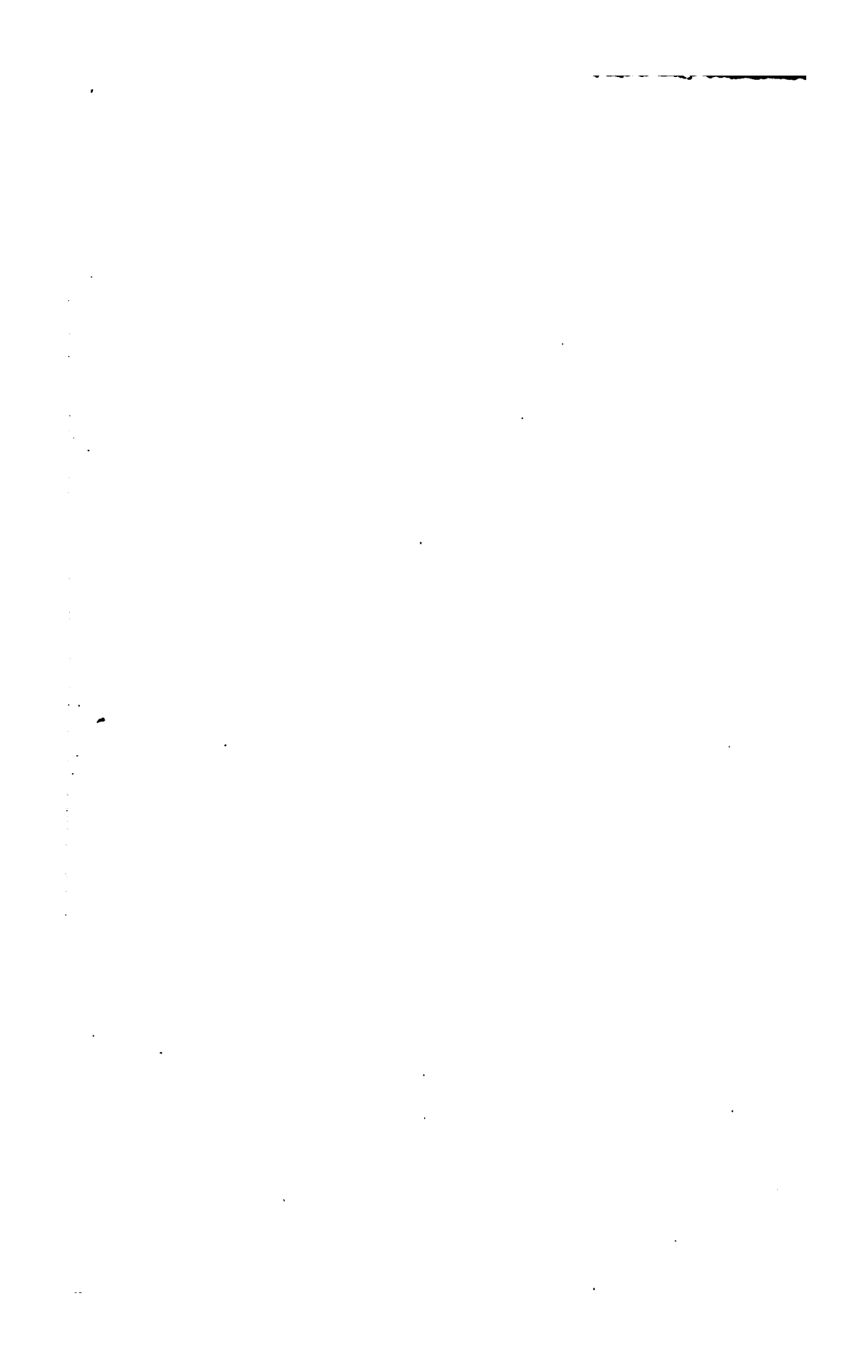
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THE  
GENERA AND SPECIES  
OF  
ORCHIDEOUS PLANTS.

BY JOHN LINDLEY, F.R.S. L. S. G.S.

Member of the Imperial Academy Naturæ Curiosorum, of the Botanical Society of  
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Berlin, Honorary Member of the Lyceum of Natural History of New York, &c. &c.  
and Professor of Botany in the University of London.

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Part I. MALAXIDÆÆ.

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LONDON:  
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M.DCCC.XXX.



TO

**NATHANIEL WALLICH, M. D. F. R. S.**

*&c. &c. &c.*

**THIS WORK**

**IS GRATEFULLY INSCRIBED**

**IN TESTIMONY OF THE HIGH RESPECT**

**AND**

**VERY SINCERE ESTEEM**

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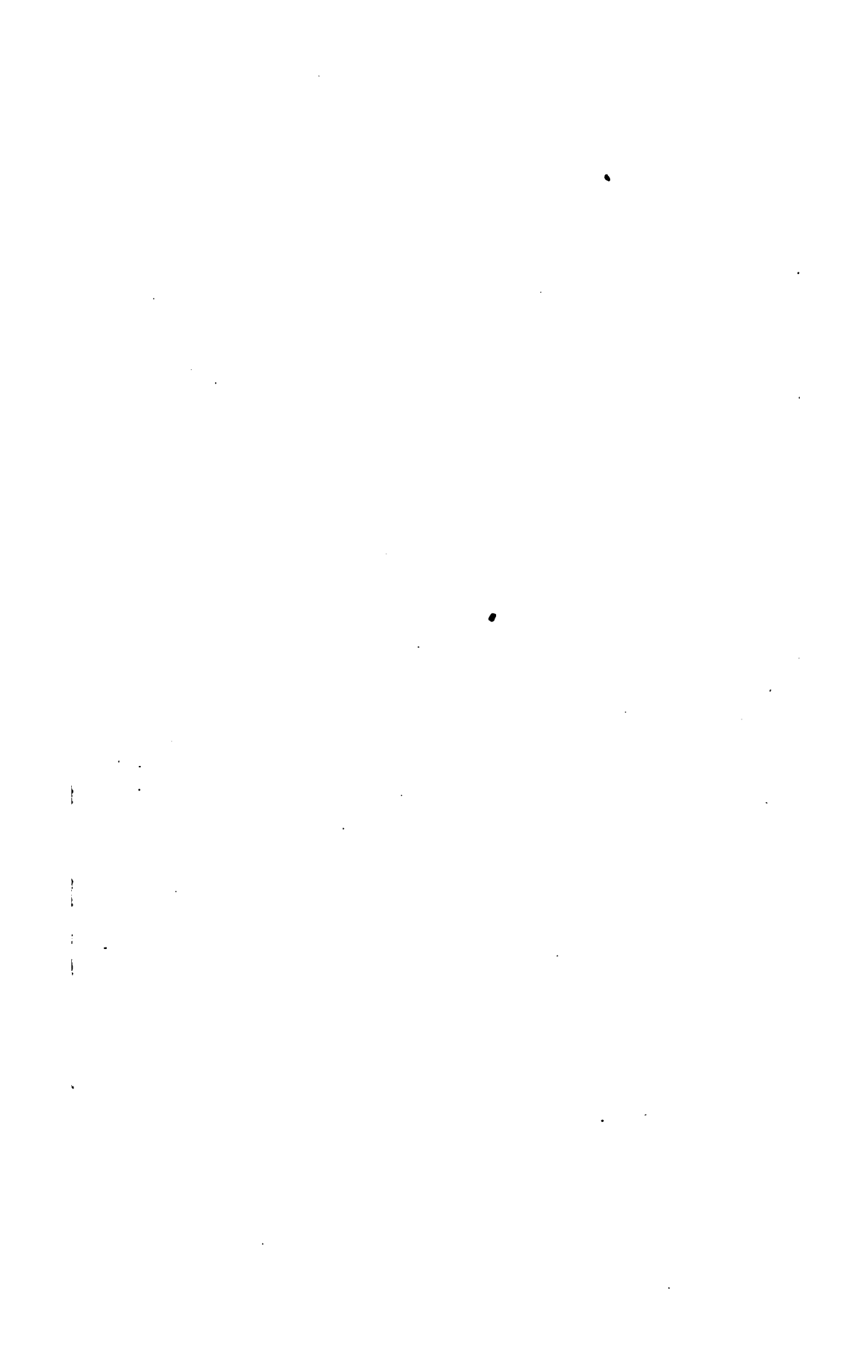
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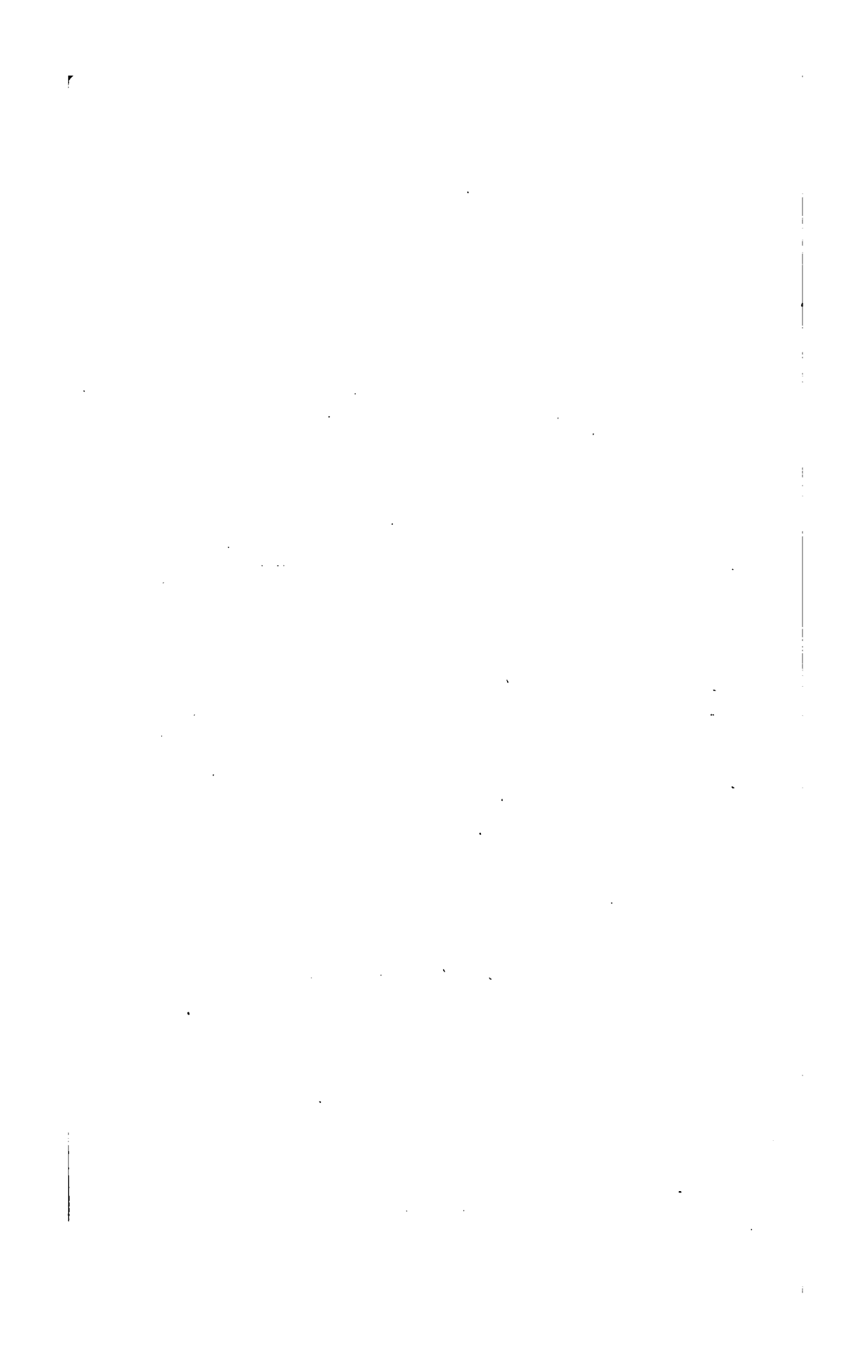
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**MEMORANDUM.** The Preface and Introduction to this Work will be printed with the last part. In the mean while the Author begs to express his deep obligation to his scientific Friends in general, for the aid they have afforded him in his undertaking, and most especially to Dr. Wallich, Mr. Lambert, and Mr. M'Rae; to the first of whom he is indebted for an invaluable series of Indian Orchidæ; to the second, for the unrestricted use of that part of Ruiz and Pavon's Herbarium which belongs to this subject; and to the last, for a very rich collection from Ceylon.

Mr. Bauer having most liberally granted the Author the use of his unrivalled Sketches, a series of ILLUSTRATIONS is in preparation, of which the first part will soon appear.



# ORCHIDEÆ.

April, 1830.





# ORCHIDEÆ.

## Tribe I. MALAXIDEÆ.

ORCHIDEÆ, Tribus MALAXIDEÆ. *Lindl. Coll. Bot. Orch. Scel.*

Pollen in massis cereaceis (polliniis) definitis cohærens, telâ omni cellulosa superflua ademptâ. Anthera terminalis, opercularis. Herbæ epiphytæ v. terrestres, foliorum basibus v. caulibus sæpius incrassatis.

I comprehend in this Tribe all the genera that have their pollen cohering in masses of a firm waxy texture, without any of the cellular substance, by which the grains are connected, remaining under the form of a distinct gland lying upon the stigma, or of an elastic transparent communication (caudicula) between the pollen masses and the gland. Malaxideæ may, in other words, be considered as Orchideous plants, the pollen of which communicates directly with the stigma, without the intervention of any intermediate apparatus.

## Section I. PLEUROTHALLEÆ.

ORCHIDEÆ; Tribus Malaxideæ,\* Pleurothalleæ. *Lindley in Bot. Reg. fol.*

Columna erecta, ad basin parum producta.

### ARTIFICIAL ANALYSIS OF THE GENERA.

#### *Pollinia 2.*

Labellum cum columna connatum, bilobum	-	-	4. LEPANTHES.
Labellum liberum			
Sepala lateralialia connata			
Columna aptera. Anthera apice membranacea	-		1. PLEUROTHALLIS.
Columna alata. Anthera apice dilatata carnea			6. OSTRICERA.
Sepala lateralialia libera			
Columna elongata			
Labellum trilobum. Pollinia dimidiata. Columna			} 7. CHRYSOGLOSSUM.
basi alata	-	-	
Labellum integerrimum. Pollinia arcuata. Co-			} 18. CYRTOSIA.
lumna basi aptera	-	-	
Columna nana			
Labellum petalis conforme			
Sepala lateralialia basi saccata	-	-	2. SPECKLINIA.
Sepala lateralialia basi plana	-	-	5. STELIS.

- Labellum petalis difforme  
 Sepala et petala conformia. Labellum planum sæpius truncatum } 10. OBERONIA.  
 Sepala et petala conformia. Labellum medio constrictum basi concavum } 27. MESOCLASTES.
- Pollinia 4.*
- Sepala lateralibus connata.  
 Sepalum supremum acuminatissimum - - - 9. RESTREPIA.  
 Sepalum supremum lateralibus conforme - - - 8. GASTROGLOTTIS.  
 Sepala lateralibus libera.  
 Sepala et petala subæqualia erecta.  
 Anthera biloba - - - 22. CÆLIA.  
 Anthera integra  
 Anthera longitudin. dehiscens  
 Labellum integerrimum. Columna bicornis 20. DENDROCHILUM.  
 Labellum trilobum. Columna mutica  
 Pollinia collateralia (oo oo) - 25. CÆLOGYNE.  
 Pollinia incumbens (♂ ♂) - - 26. DICRYPTA.  
 Anthera transversè dehiscens  
 Labellum ventricosum - - - 23 PHOLIDOTA.  
 Labellum lineare basi auriculatum - - 21. OTOCHILUS.  
 Sepala et petala patentissima valdè inæqualia.  
 Labellum cum columna angulum rectum efformans, basi sagittatum v. cordatum } 13. MICROSTYLIS.  
 Labellum cum columna subparallelum  
 Labellum (nanum) petalis conforme. Pollinia incumbens (♂ ♂) } 15 MALAXIS.  
 Labellum petalis majus et difforme. Pollinia collateralia (oo oo)  
 Labellum integrum. Columna elongata.  
 Labellum basi cucullatum cum facie columnæ altè accretum, sepalis lateralibus obliquè connatum } 11. EMPUSA.  
 Labellum basi planum  
 Columna semiteres - - 19. LIPARIS.  
 Columna disciformis compressa 12. PLATYSTYLIS.  
 Labellum tridentatum, nunc excavatum. Columna nana } 14. DIENIA.
- Pollinia 8.*
- Labellum calcaratum - - - 16. NEPHELAPHYLLUM.  
 Labellum ecalcaratum  
 Petala aristata - - - 17. ACIANTHUS.  
 Petala mutica  
 Columna semiteres - - - 3. OCTOMERIA.  
 Columna alata, apice cucullata. Labellum lamellatum 24. DILOCHIA.

## I. PLEUROTHALLIS.

*Pleurothallis*, R. Brown, in *Hort. Kew.* 5. 211.

Sepala conniventia, subæqualia : lateralibus v. omnibus connatis. Petala minora. Labellum liberum, cum columna subparallelum, integerrimum, petalis difforme. Columna elongata, aptera, libera, cum ovario continua. Anthera apice membranacea. Pollinia 2, nunc materie pulverea ad apicem coherentia. — Herbæ epiphytæ, rhizomate repente filiformi. Caules filiformes, monophylli, sæpius vaginati. Flores axillares, solitarii, v. fasciculati, v. racemosi, herbacei v. fusi.

The species of this genus is in great want of careful examination by some West Indian Botanist who has opportunities of seeing them alive. In Herbaria the specimens are almost always bad, and the parts are besides difficult to make out, on account of their minuteness. I am in possession

of a species from Mexico, and of another from Rio, both of which are no doubt undescribed, but I am unwilling to publish them without better materials.

1. *PLEUROTHALLIS ruscifolia*. *R. Br.*

*P.* folio ovali-lanceolato caulis longitudine, floribus fasciculatis, spathâ bivalvi, pedicellis 2-3-bracteatis filiformibus floribus longioribus, sepalis ovato-lanceolatis: lateralibus connatis, petalis lineari-lanceolatis minoribus, labello oblongo undulato obtuso.

*Epidendrum ruscifolium*. *Linna. sp. pl.* 1353. *Jacq. Amer.* 226. t. 133. f. 3.

*Dendrobium ruscifolium*. *Swartz! n. act. Ups.* 6. p. 84. *Willd. n.* 16.

*Pleurothallis ruscifolia*. *R. Br. in Hort. Kew.* 5. 211. *Hooker Es. Fl.* 197.

*Hab.* in Jamaica super arbores, *Swartz*; in insulis Caribæis, *De Ponthieu*, (*v. s. sp. in Herb. Banks. et v. cult.*)

*Dr. Hooker's* figure is authority for this species, and it is from it that I have framed my specific character. It is extremely probable that more species than one are confounded under the same name. I have specimens from Rio of what is no doubt nearly allied to this, but which differs in the form of the leaf, and in having a ciliated Labellum; my specimens are not good enough to describe.

2. *PLEUROTHALLIS laurifolia*. *Kunth.*

*P.* "caule monophyllo, folio oblongo acuminato basi angustato, floribus fasciculato-congestis, foliolis calycinis exterioribus lateralibus apice liberis." *Kunth. in Humb. et Bonpl. n. g. et sp.* 1.364. *synops.* 1.346.

*Hab.* in devexis Andium *Popayanensium* alt. 1200 hex. florens Novembre; *Humboldt et Bonpland.*

Related to *P. ruscifolia*, according to *Kunth.*

3. *PLEUROTHALLIS succosa*.

*P.* caule tereti folio ovato-lanceolato succoso triplo longiore, floribus fasciculatis subsessilibus, sepalis lanceolatis: lateralibus omnino connatis, petalis linearibus subulatis, labello minimo ovato carnosio recurvo columnæ longitudine.

*Humboldtia succosa*. *Pavon. in Herb. Lamb.*

*Hab.* in Peruvia, *Pavon.* (*exam. s. sp. in Herb. Lambert.*)

Caulis semipedalis. Folium 2 uncias longum. Petala integra, sepalis paulò breviora. Columna nana, anthera horizontali subglobosa.

4. *PLEUROTHALLIS cordata*.

*P.* caule tereti sulcato folio subrotundo horizontali altè cordato acuminato multo longiore, floribus fasciculatis e spatha brevi coriacea subexsertis.

*Humboldtia cordata*. *Fl. Peruv! syst. p.* 234.

*Stelis cordata*. *Pers. syn. no.* 3.

*Hab.* in Peruvia; *Pavon.* (*v. s. defl. in Herb. Lambert.*)

*Gigantea*. Caules validi, erecti, esquamati, ferè pedales. Folia horizontalia, 3½ uncias longa, sinubus baseos cordatæ imbricantibus. Alabastrum unicum vidi valdè juvene subglobosum, undè sepala rotundata conjicio.

? 5. *PLEUROTHALLIS lanceolata*.

*P.* caule ascendente tereti folio ovato lanceolato erecto ferè triplo longiore,

racemo solitario folio longiore apice nutante e spathâ maximâ coriacea dimidiam folii ferè æquante.

*Humboldtia lanceolata.* *Fl. Peruv. / syst.* 237.

*Stelis lanceolata.* *Pers. syn.* no. 12.

Hab. in *Peruvia*; *Pavon.* (v. s. sp. defl. in *Herb. Lamb.*)

Caulis robustus 10 uncias, folium in basi attenuatum 7, spatha 3, racemus 8 longi.

#### 6. *PLEUROTHALLIS tribuloides.*

P. "caule brevissimo monophyllo, folio lanceolato obtuso emarginato, pedunculo brevissimo unifloro, capsula globosa echinata." *Swartz sub Dendrobio.*

*Epidendrum tribuloides, Swartz Prodr.* 123.

*Dendrobium tribuloides, Swartz Fl. Ind. Occ.* 1525. *Willd. n.* 8.

Hab. in sylvis interioribus *Jamaicæ*, parasitica arborum *Crescentiæ*; *Swartz.*

Flores minuti rubri, bracteis geminis ovatis parvis sub germine. Sepala ovata: lateralibus semiconnatis intus punctatis. Petala colore saturatiore. Labellum oblongum, obtusum, concavum, recurvatum, striatum, margine ciliato; ex *Swartz.*

#### 7. *PLEUROTHALLIS prolifera. Herbert.*

P. caulibus ancipitibus, folio oblongo cochleato carnosopro prolifero racemo duplo longiore, bracteis cuneatis cuspidatis cucullatis pedicello brevioribus, sepalis connatis: lateralibus semiconnatis, petalis labelloque conformibus duplo longioribus, clinandrio dentato.

Pl. prolifera, *Herbert in litt. Lindl. in Bot. Reg. t.* 1298.

Hab. in *Brazilia* (v. v. cult.)

#### 8. *PLEUROTHALLIS racemiflora. Lindley.*

P. folio oblongo emarginato racemo secundo multifloro duplo brevior, bracteis vaginatis appressis, sepalis ovato-lanceolatis: lateralibus connatis petalis ovatis subæqualibus, labello subunguiculato linguæformi obtuso plano, clinandrio dentato.

*Epidendrum racemiflorum. Swartz Prodr.* 125.

*Dendrobium racemiflorum. Swartz / Fl. Ind. Occ.* 1543. *Willd. n.* 12.

*Pleurothallis racemiflora. Lindl. in Hooker. Exot. Flor., t.* 123.

Hab. super arbores in summis montibus *Jamaicæ australis*; *Swartz. (v. s. sp. in Herb. Banks. et v. cult.)*

#### 9. *PLEUROTHALLIS emarginata.*

P. acaulis, foliis solitariis lineariloricatis emarginatis, racemis capillaribus foliis triplo longioribus, sepalis ovato-lanceolatis altè connatis: apicibus liberis carnosis, petalis cuneatis columna brevioribus labelloque trilobonanis.

*Humboldtia emarginata. Pavon. in Herb. Lambert.*

Hab. in *Peruvia*; *Pavon. (exam. s. sp. in Herb. Lamb.)*

Cæspitosa, verosimiliter epiphyta. Folia cum basi petioliformi 4½ uncias longa. Racemi cernui (an penduli?) 9 uncias longi. Bractes lineares, cucullatæ. Sepala omnia ultra dimidiam connata. Columna triplo sepalis brevior, petalis tamen longior. Labellum cum columna parallelum, ejusdem longitudine, trilobum, lobis rotundatis.



10. *PLEUROTHALLIS spiralis*.

*P. caule tereti squamoso folio oblongo æquali, racemo erecto spirali folio longiore, bracteis acuminatis, sepalis ovatis obtusiusculis: lateralibus in unum cymbiforme connatis, petalis columna labelloque truncatis nanis.*

*Humboldtia spiralis. Fl. Peruv! syst. 237.*

*Stelis spiralis. Pers. syn. no. 13.*

*Hab. in Peruvia, Pavon. (exam. s. sp. in Herb. Lambert.)*

Flores maximi in genere, verosimiliter purpurei. Bracteæ latæ, membranaceæ, cucullatæ, apice acuminatissimæ. Sepala septemvenia, latè ovata. Petala minima cuneata, quasi truncata, margine superiore crasso plano, trivenia. Labellum triquetrum. Columna triquetra. Anthera membranacea unilocularis.

This very curious species has the habit and petals of *Stelis*, but its connate lower sepals fix it in *Pleurothallis*; it connects the two genera.

11. *PLEUROTHALLIS macrophylla. Kunth.*

*P. "caule monophyllo, folio oblongo acuto, spicis compluribus aggregatis, foliolis calycinis exterioribus lateralibus omnino connatis." Kunth. in Humb. et Bonpl. n. g. et sp. 1. 365. Synops. 1. 346.*

*Hab. super arbores in Provincia Popayanensi, florens Novembre; Humboldt et Bonpland.*

12. *PLEUROTHALLIS pulchella. Lindley.*

*P. spicis geminis folio oblongo-lanceolato obtuso coriaceo duplo longioribus, floribus nutantibus, sepalis oblongis apice angustatis triveniis: superiore duplo latiore.*

*Stelis pulchella. Kunth. in Humb. et Bonpl. n. g. et sp. pl. 1. 364. t. 90. Synops. 1. 346.*

*Pleurothallis pulchella. Lindley in Hooper. Exot. Fl. 123. in notis.*

*Hab. sub cælo temperato Regni Quitensis, alt 1370 hex. florens Februario; Humboldt et Bonp.*

13. *PLEUROTHALLIS laxa.*

*P. "caule monophyllo, folio oblongo acuminato, racemis laxis; capsulis nudis." Swartz sub Dendrobio.*

*Epidendrum laxum. Swartz Prodr. p. 125.*

*Dendrobium laxum. Swartz! Fl. Ind. Occ. 1547. Willd. n. 14.*

*Hab. in altissimis montibus Jamaicae australis, super ramos arborum; Swartz. (v. s. sp. in Herb. Banks. sine analysi.)*

*P. alpestri valdè affinis; utraque bracteis cucullatis distincta. Racemi foliis subæquales. Flores secundi, atropurpurei, lineati. Bracteæ cucullatæ. Sepala lateralialia semiconnata. Labellum ovatum, canaliculatum, apice reflexum, cœrulescens; ex Swartz.*

14. *PLEUROTHALLIS alpestris.*

*P. "caule monophyllo, folio ovato-lanceolato, racemis laxis, carinis capsularum muricatis." Swartz sub Dendrobio.*

*Epidendrum alpestre. Swartz Prodr. 125.*

*Dendrobium alpestre. Swartz Fl. Ind. Occ. 1545. Willd. n. 13.*

*Hab. in altissimis montibus Jamaicae australis, super ramos arborum; Swartz. (v. s. sp. in Herb. Banks. sine analysi.)*

Racemi folio sæpè longiores. Flores parvi, secundi, luteo-virides. Sepala lateralia semiconnata. Labellum ovatum, obtusum, concavum, minutum, atropurpureum; ex Swartz.

## II. SPECKLINIA.

Sepala conniventia, æqualia, distincta: lateralibus basi saccatis extus gibbosis. Petala sepalis conformia triplo minora (nana). Labellum liberum petalis conforme basi saccatum. Columna nana, libera, membranaceo-alata. Anthera unilocularis (bilocularis *Hooker*), infrapicilaris. Pollinia 2, plano-convexa (4, *Hooker*).—Herbæ pusillæ, caulibus filiformibus monophyllis. Folia coriacea. Pedunculi axillares, capillares, pauciflori.

*Obs.* numerus Polliniorum fortè dubius; in *S. floribunda* certissimè 2 plano convexa in anthera uniloculari; in *S. emarginata* 4, per paria cohærentia secundum *Hooker*. Genus *Pleurothalli* proximum, numero polliniorum incerto, sepalis liberis basi saccatis præcipuè diversum.

*Nomen in honorem Rodolphi Specklin sculptoris in ligno eximii, cujus icones plantarum pro ævo suo præstantissimæ in Fuchsii Historia stirpium, de Botanica optimè meruerunt.*

### 1. SPECKLINIA sertularioides.

*S. caulibus brevissimis, folio lanceolato subpetiolato, sepalis lanceolatis subpatentibus, pedunculis unifloris, rhizomate articulat.*

*Epidendrum sertularioides. Swartz Prodr. 123.*

*Dendrobium sertularioides. Swartz! Fl. Ind. Occ. 1541. Willd. n. 11.*

*Pleurothallis sertularioides. Spreng. syst. 3. 731.*

*Hab. in arboribus densis antiquis montium Jamaicæ; Swartz. (v. s. sp. in Herb. Banks.)*

*Rhizoma Sertulariæ modo, articulat, unde nomen. Pedunculi solitarii, capillares, longitudine ferè foliorum squamis spathaceis duabus in medio. Flores albid, apicibus flavis. Labellum lanceolatum recurvum, basi concavum; ex Swartz.*

### 2. SPECKLINIA lanceola.

*S. caulibus brevissimis, folio lanceolato subpetiolato, sepalis obtusis patentibus, petalis apice subciliatis, pedunculis bifloris.*

*Epidendrum lanceola. Swartz Prodr. 123.*

*Dendrobium lanceola. Swartz! Fl. Ind. Occ. 1539. Willd. n. 10.*

*Pleurothallis lanceola. Spreng. syst. 3. 731.*

*Hab. super arbores in altissimis montibus Jamaicæ australis; Swartz. (v. s. sp. in Herb. Banks.)*

*Pedunculus capillaris, longitudine folii, squamis aliquot munitus. Flores fulvi v. aurantii, minuti. Labellum oblongum, obtusum, concavum, recurvum, purpureum, margine luteum; ex Swartz.*

*Obs. Rhizoma repens in exemplare Swartziano nullum.*

### 3. SPECKLINIA emarginata.

*S. caulibus folio oblongo emarginato subæqualibus, sepalis lanceolatis, pedunculis bifloris.*

- Epidendrum corniculatum.* Swartz Prodr. 123.  
*Dendrobium corniculatum.* Swartz! Fl. Ind. Occ. 1537. Willd. n. 9.  
*Epidendrum?* monophyllum. Hooker. Esot. Fl. t. 109.  
*Cymbidium corniculatum.* Spreng. syst. 3. 722.

Hab. in Jamaica; Swartz, Hooker. (v. s. sp. in Herb. Banks.)

Pedicelli basi bractea cucullata suffulti. Sepala viridia. Petala duplò breviora mediò purpurea. Labellum purpureum, lineari-lanceolatum, basi gibbosum. Columna apice dentata. Ovarium purpureum, verrucosum, teste Hooker. Folia ovalia marginata, apice bifida. Scapus capillaris, uniflorus, foliis duplò longior; ex exempl. Swartziano.

4. *SPECKLINIA floribunda.*

S. caule ancipiti folio oblongo-lanceolato duplò longiore, spica flexuosa multiflora folio aequali, labello trilobo 2-cristato.

*Dendrobium ophioglossoides.* Sieber. Fl. Martin. essicc. n. 206.

Hab. in Martinica; Sieber. (habeo s. sp. communic. amiciss. Prescott.)

Caules numerosi, erecti, cæspitiosi. Folium apice integrum mucronulatum. Alabastra ovata. Sepala lanceolata: lateralibus basi saccatis carinatis. Petala spatulata, minora, denticulata. Labellum petalis æquale, trilobum, cristà duplici membranacea longitudinali. Columna semiteres, clinandrio cucullato, membranaceo, anticè dentato. Anthera certo certius unilocularis, pollinibus 2, plano-convexis, apice materie viscidà cohærentibus.

? 5. *SPECKLINIA linearis.*

S. caule ancipiti folio lineari-oblongo subtriplò longiore, spicis capillaribus bifloris: altero folio subæquali, altero duplò brevior.

*Humboldtia purpurea.* Flora Peruv. syst! p. 233.  
*Stelis purpurea.* Pers. syn. 2. 524.

Hab. in Mexico et Peruvia; Pavon. (v. s. sp. defloratum in Herb. Lambert.)

Caules cæpitosi, 2-3-unciales. Folia uncialia, apice æqualia, obtusa.

### III. OCTOMERIA.

*Octomeria*, R. Br. in H. Kew. ed. 2. v. 5. p. 211.

Sepala patentia, æqualia, basibus paulò connata, lateralibus cum basi leviter productà columnæ connatis sed nullo modo obliquis. Petala sepalis æqualia et conformia. Labellum basi saccatum, leviter trilobum, cum pede columnæ articulatam, patens. Columna semiteres, elongata, basi leviter et abruptè productà, cum ovario continua, nec incumbens. Anthera terminalis, 4-ocularis, cristà callosa. Pollinia 8, quaternatim cohærentia, collateralia (0000 0000).—Herbæ caulescentes, caulibus teretibus articulatis, vaginis fibrosis vestitis, monophyllis, (rarò foliosis). Folia coriacea. Flores axillares, fasciculati aut solitarii, (rarò terminales racemosi). Pedicelli bracteis imbricati.

This genus forms a transition from *Pleurothallæ* to *Dendrobicæ*. The differences between it and *Eria* will be noticed in speaking of the latter genus, to which I have to add the remarkable circumstance of all the pollen masses being collateral and not lying in pairs upon each other, a fact which I have learned from Mr. Bauer's elaborate drawings. Dr. Hooker's figure in the Botanical Magazine, t. 2764, is at variance with this statement;—but I presume that excellent Botanist's specimens were in a very imperfect state, as I find in the same plate the anther, which in

April, 1830.

c

the species represented by Dr. Hooker is unquestionably 4 celled with a fleshy crest, figured as absolutely bilocular without any crest.

1. OCTOMERIA graminifolia. *R. Br.*

O. foliis solitariis lanceolatis, floribus axillaribus fasciculatis, labello ovato: lobis lateralibus abbreviatis intermedio bicostrato tridentato, sepalis petalisque ovatis.

Helleborine graminea repens biflora. *Plum. sp. 9. ic. 176. f. 1.*

Epidendrum graminifolium. *Linn. sp. pl. 1353.*

Dendrobium graminifolium. *Willd. n. 15.*

Octomeria graminifolia. *R. Br. l. c. Hooker, Bot. Mag. 2764.*

Hab. in insulis Caribæis. (v. v. cult.)

Flores flavi, duabus maculis sanguineis, numero incerti, nunc solitarii, nunc binati ternative. Caules majores et crassiores quam in O. Baueri.

2. OCTOMERIA Baueri.

O. foliis solitariis lanceolatis, floribus axillaribus fasciculatis, labello oblongo: lobis lateralibus sinuosis intermedio elongato apice flexuoso dilatato apiculato, sepalis petalisque ovatis.

Hab. in India Occidentali. Floruit in Horto regio Kewensi Martio 1817. (*V. ic. pict. cel. Baueri.*)

Flores albi apice flavi. Labellum maculis nullis.

This species and the foregoing so entirely resemble each other in habit, foliage and inflorescence, that it is in vain to seek to which of them the specific name graminifolia may with the greatest justice be applied. Mr. Brown's specific character is equally applicable to both, and any Botanist might be liable to confound them when dried. I have therefore retained the name for the species figured by Dr. Hooker, who may be considered as the first who really established the species with precision.

3. OCTOMERIA serratifolia. *Hooker.*

O. foliis distichis apice serrulatis lineari-lanceolatis basi vaginantibus, racemo terminali paucifloro, labello oblongo-lineari crenulato: lobo intermedio abbreviato obtuso, sepalis petalisque lanceolatis.

Octomeria serratifolia. *Hooker, Bot. Mag. 2823.*

Hab. in montibus Brazilæ. *Hooker.*

Flores albi fulvo suffusi. Anthera secundum cl. Hooker 2-locularis, loculis transversim septulo divis; (character insolitus!) An pollinia rectè visa? —ex habitu valdè suspicor generis esse diversi.

#### IV. LEPANTHES.

Lepanthes. *Swartz in act. Scient. Soc. Ups. vi. p. 85; Flora Ind. Occ. p. 1555.*

Sepala patula, basi, præsertim lateralia, connata. Petala duo, libera, nana. Labellum (secundum *Swartzium* nullum sed verosimiliter) apice bilobum cum columna connatum. Columna elongata, teres (secundum *Swartz. bialata*, sed alæ verosimiliter lobi labelli connati, cum auctor ille alas *L. cochlearifoliae* et *tridentatae* ad latera baseos columnæ describat). Pollinia 2. —Herbæ epiphytæ, caulibus filiformibus monophyllis vaginatis, spicis axillaribus, Pleurothallis omnino habitu. Flores lutei, v. sanguinei, minutissimi, columnâ semper sanguineâ.

*Obs.* Genus recognoscendum, Swartzio solo visum. Exemplaria omnium specierum extant in Herb. Banksiano sed deflorata. Pleurothalli valdè affine.

1. *LEPANTHES tridentata.* Swartz.

L. "folio ovato acuto marginato apice tridentato; floribus basi triquetris, petalis (sepalis) acuminatis, alis columnæ erecto-incurvis." Swartz. *Fl. Ind. Occ.* p. 1561.

*Epidendrum tridentatum.* Swartz *Prodr.* p. 125.

Hab. cum *L. pulchellâ*; Swartz. (*v. s. sp. in Herb. Banks. sine floribus.*)

Flores purpureo-lutei.

2. *Lepanthes pulchella.* Swartz.

L. "folio subrotundo acuto; petalis (sepalis) acuminatis ciliatis: interioribus (petalis) utrinque acutis posticè cruciantibus." Swartz *Fl. Ind. Occ.* p. 1559.

*Epidendrum pulchellum.* Swartz *Prodr.* p. 125.

Hab. supra arbores inter muscos in altissimis montibus *Jamaicæ*, florens Julio et Augusto; Swartz, (*v. s. sp. in Herb. Banks. sine floribus.*)

Flores majores quam *L. concinnæ*, lutei, Swartz. Folium ex exemplare in Herb. Banksiano ovatum, acutum, potius quam subrotundum.

3. *LEPANTHES concinna.* Swartz.

L. "folio ovato-acuminato; petalis (sepalis) subrotundis acutis; interioribus (petalis) posticè obtusis." Swartz *Fl. Ind. Occ.* p. 1557.

*Epidendrum ovale.* Swartz *Prodr.* p. 125.

Hab. in montibus altis cæruleis *Jamaicæ*, epiphyta florens vere; Swartz. (*v. s. sp. in Herb. Banks. sine floribus.*)

Flores flavi. Folia tricostata.

4. *LEPANTHES cochlearifolia.* Swartz.

L. "folio orbiculato, convexo concavo." Swartz *Fl. Ind. Occ.* p. 1563.

*Epidendrum cochlearifolium.* Swartz *Prodr.* p. 126.

Hab. in truncis arborum nec non rupibus muscis vestitis in summis montibus *Jamaicæ* australis, florens ultimis mensibus anni; Swartz. (*v. s. sp. in Herb. Banks. sine floribus.*)

Flores sanguinei. Pollinium unicum! Swartz. Caulis squamis ovatis ciliatis plurimis vestitus.

## V. STELIS.

*Stelis.* Swartz in Schrad. *Diar. Botan.* 1799. p. 239. t. 2. f. 3.

Sepala globoso-conniventia, æqualia, valvata, basibus subconnata. Petala nana. Labellum nanum petalis conforme. Columna nana, mutica, cum ovario continua. Anthera 1-locularis. Pollinia 2, ovata, cereacea, distincta, nunc ad apicem materie viscidâ cohærentia,——Herbæ epiphytæ habitu Pleurothallis.



1. *STELIS ophioglossoides*. Swartz.

S. folio tenui lanceolato apice sæpius recurvo, spicâ laxâ folio longiore : rachi rectâ, floribus cernuis quaquaversis obsoletè hexagonis, petalis truncatis, labello basi subcordato.

*Epidendrum ophioglossoides*. Linn. *sp. pl.* 1353. Jac. *Amer.* 225. t. 133. 2.

*Epidendrum trigoniflorum*. Swartz *Prodr.* 125.

*Dendrobium ophioglossoides*. Swartz *Nouv. Act. Ups.* 6. 83.

*Stelis ophioglossoides*. Swartz ! *Fl. Ind. Occ.* t. 1551. Lindl. in *Bot. Reg.* 935.

Hab. super arbores in sylvis montosis *Jamaicæ* ; Swartz. (v. s. sp. in *Herb. Banks. et v. cult.*)

2. *STELIS micrantha*. Swartz.

S. folio oblongo-lanceolato coriaceo obtuso, spicâ folio duplè longiore : rachi rectâ, floribus nutantibus secundis trigonis, petalis apiculatis labello conformibus.

*Epidendrum micranthum*. Swartz *Prodr.* 125.

*Stelis micrantha*. Swartz ! *Fl. Ind. Occ.* 1553. Willd. n. 2. Hooker. *Fl. exot.* t. 158.

*Humboldtia parviflora*. *Fl. Peruv. syst.* p. 236.

*Stelis parviflora*. Pers. *syn.* no. 8.

Hab. super arbores adque latera rupium in altis montibus *Jamaicæ* ; Swartz ; in *Peruvia* ; Pavon. (v. s. sp. in *Herb. Banks. et Lambert. et v. cult.*)

Dr. Hooker represents the pollen masses as cohering by means of a transparent gland. This is however clearly a mistake.

3. *STELIS pusilla*. Kunth.

S. " spica solitaria folium lanceolatum acutum coriaceum duplè superante, floribus subnutantibus : foliolis calycinis exterioribus subrotundis obtusis trinerviis subæqualibus." Kunth. in *Humb. et Bonpl. n. g. et sp. pl.* 1. 361. *Synops.* 1. 344.

Hab. in Regno *Quitensi*, alt. 1230 hex. florens Maio ; Humboldt et Bonpland.

4. *STELIS carnosa*. Kunth.

S. " spica solitaria cylindracea folium oblongum obtusum subcarnosum duplè superante ; floribus approximatis erectiusculis ; foliolis calycinis exterioribus ovato-subrotundis enerviis subæqualibus." Kunth. l. c. *Synops.* 1. 344.

Hab. in Provincia *Jaen de Bracamoros*, alt. 1000 hex. florens Augusto ; Humboldt et Bonpland.

5. *STELIS floribunda*. Kunth.

S. " spicis subquaternis folio oblongo obtuso coriaceo duplè longioribus ; floribus subnutantibus ; foliolis calycinis exterioribus ovatis acutiusculis trinerviis internè pubescentibus subæqualibus." Kunth. l. c. *Synops.* 1. 344.

Hab. in Andibus *Popayanensium*, alt. 1210 hex. florens Novembri ; Humboldt et Bonpland.

An *Humboldtia polystachya* R. et P. Kunth.

6. *STELIS angustifolia*. Kunth.

S. " spicis subgeminis folium oblongo-lanceolatum obtusiusculum subcoriaceum æquantibus ; floribus subnutantibus ; foliolis calycinis exteriori-

bus ovatis acutiusculis trinerviis internè pubescentibus subæqualibus." *Kunth. l. c. Synops. 1.345.*

Hab. in Regno *Novo Granatensi*, regione temperata alt. 1004 hex. florens Decembri; Humboldt et Bonpland.

An eadem ac. *S. floribunda*? *Kunth.*

7. *STELIS elongata. Kunth.*

S. "spica solitaria folium lanceolatum obtusum subcoriaceum quadruplò superante; floribus nutantibus; foliolis calycinis exterioribus oblongis obtusis trinerviis: superiore cæteris longiore." *Kunth. l. c. Synops. 1.345.*

Hab. in Provincia *Popayanensi*, alt. 480 hex. florens Novembri; Humb. et Bonpl.

8. *STELIS alba. Kunth.*

S. "spica solitaria folium oblongum acutiusculum subcoriaceum duplò superante; floribus nutantibus; foliolis calycinis exterioribus ovato-oblongis acutis subæqualibus." *Kunth. l. c. Synops. 1.345.*

Hab. in Prov. *Popayanensi*, alt. 1400 hex. florens Novembri; Humb. et Bonpl.

9. *STELIS macrocarpa. Kunth.*

S. "spicis subgeminis folio oblongo obtuso subcoriaceo duplò longioribus; floribus subnutantibus; foliolis calycinis exterioribus subrotundo-ovatis acutiusculis subquinquenerviis subæqualibus." *Kunth. l. c. Synops. 1.345.*

Hab. in Regno *Novo Granatensi*, alt. 1360 hex. florens Decembri; Humb. et Bonpl.

*Steles omnes alias Willdenovii, sive Humboldtias Floræ Peruvianæ, prætermitto, prout inextricabiles, et descriptionibus miserrimis fretas, omnino Botanices indignis. Species 6 enumerantur, Peruvix propriæ.*

## VI. OSYRICERA.

*Osyricara. Blume Bijdr. 307. Tabellen 58.*

Sepala subringentia ad basin subconnata: lateralibus omnino concretis. Petala minora. Labellum ventricosum, indivisum cum columnæ ungue calloso articulatum; limbo convexo glanduloso. Columna brevis apice bialata: alis tricuspidatis. Anthera semibilocularis, antea in laminam glandulosam expansa. Pollinia 2, ovalia, pulposo-cereacea.—Herba epiphyta. Folia lineari-lanceolata, pseudobulbis moniliformibus suffulta. Spicæ radicales. Flores purpurescents. *Character ex Blume.*

1. *Osyricara crassifolia. Blume l. c. tab. 58.*

Hab. in arboribus ad montem Salak, Insulæ *Javæ*, florens Decembri, Januario; Blume.

## VII. CHRYSOGLOSSUM.

*Chrysoglossum. Blume Bijdr. 337. Tabellen 7.*

Sepala ringentia, basi leviter coalita: lateralibus exterioribus labello superpositis. Petala subæqualia. Labellum basi auriculatum, ungui columnæ

calloso elasticè affixum, internè lineis prominentibus cristatum : limbo sublobato patente. Columna cum ovario continua, utrinque cornuta, basi alata et callosa. Anthera bilocularis. Pollinia 2, subglobosa, angulata, libera.—Herbæ terrestres. Radices annulatæ repentes, fibrillatæ. Folia petiolis subbulbosis suffulta, subsolitaria. Pedunculi radicales. Flores laxè spicati, pedicillati, bracteati. *Character ex Blume.*

1. *CHRYSOGLOSSUM* ornatum. *Blume.*

C. "foliis lanceolatis pedunculisque glabris, labelli lobis rotundatis : medio fornicato." *Blume l. c.*

Hab. in montosis Salak, ad ripas fluvii Tjapus insulæ Javæ, florens Decembri ; *Blume.*

2. *CHRYSOGLOSSUM* villosum. *Blume.*

C. "foliis ovato-oblongis pedunculisque villosiusculis, labelli lobis lateralibus acutis." *Blume l. c. tab. 7.*

Hab. in umbrosis montis Gede, insulæ Javæ, florens Maio ; *Blume.*

### VIII. GASTROGLOTTIS.

*Gastroglottis. Blume Bijdr. 397.*

Sepala patentia : lateralibus latioribus labello suppositis basi que connatis. Labellum ventricosum, internè cum columna connatum : limbo erecto, semitrifido. Columna supernè libera, cum ovario continua, apice attenuata. Anthera dorsalis, bilocularis, denticulo dorsali affixa. Pollinia 4, obovata, per paria filis glutinosis cohærentia.—Planta terrestris. Radices fibrosæ. Caulis simplex erectus. Folia oblongo-lanceolata, plicata. Pedunculus terminalis, elongatus, supernè multiflorus. Flores parvi, sessiles, bracteolati, flavo-virentes. *Char. ex Blume.*

*Microstyli proxima sec. Blume.*

1. *G. montana. Blume.*

Habitat inter lapides ad marginem fluvii Tjapus, Javæ, florens Decembri ; *Blume.*

### IX. RESTREPIA.

*Restrepia. Kunth. n. g. et sp. 1. 367.*

Sepala patentia : supremo acuminatissimo, duobus inferioribus obtusis connatis. Petala libera, sepalo supremo conformia. Labellum integrum, liberum, patens, basi bicornè. Columna semiteres. Anthera terminalis. Pollinia 4.—Arborum incola, caulescens, caule haud incrassato, squamis magnis vaginato. Folia plicata. Flores solitarii axillares. *Character ex Kunthio.*

1. *RESTREPIA* antennifera. *Kunth.*

*Restrepia antennifera. Kunth. in Humb. et Bonpl. n. g. et sp. pl. 1. 367. t. 94. Synops. 1. 347.*

Hab. in declivitate Andium *Paraguayensium*, inter Almaguer et Pasto, ad arborum vetustarum truncos alt. 1480 hex. (Regno Novo Granat.) florens Novembri ; *Kunth.*

Folia subrotundo-ovata membranacea petiolo canaliculato. Labellum oblongo-lineare emarginatum seriebus 4 tuberculorum.

## X. OBERONIA.

Sepala patentia v. reflexa, sæpius inter se æqualia, libera. Petala sepalis minora, nunc iis conformia, nunc linearia, aliquandò erosa. Labellum ascendens, cum columnâ hand articulatum, formâ variâ, sæpius elongatum, semper magis minusve distinctè 4-lobum: lobis lateralibus nunc dentiformibus, intermediis quandoque ferè connatis. Columna minima, libera, stigmate elevato. Anthera bilocularis. Pollinia duo, pyriformia, solida. —Herbæ supra arbores et saxa crescentes, sæpius acaules, foliis semper distichis. Scapus sæpius anceps. Flores nunc racemo longissimo verticillati, nunc alterni, virides v. lutei.

This genus is nearly related to *Stelis* from which it is obviously distinguished by its labellum, and its habit. From *Pleurothallis* to which one species has been lately referred it is distinguished both by its habit and by its lateral sepals not cohering in any degree.

*Ut Oberon, regiolus ille Dryadeus, Empusarum septentrionalium princeps, in ramos arborum equitat, inter folia vultum multiformem abscondens, sic herbiolæ nostræ, facie non minus mutabiles, in Indiæ sylvis latitant v. in curru suo frondoso triumphant.*

1. *OBERONIA iridifolia*. Lindl. in Wall. Cat. no. 1948.

*O. foliis latis ensiformibus, racemo longo basi ancipiti multifloro, floribus verticillatis, bracteis fimbriatis, sepalis reflexis, petalis erosis, labello subovato obtuso fimbriato basi concavo, obsolete 4-lobato.*

*Malaxis ensiformis. Smith.*

*Cymbidium iridifolium. Roxb! Hort. Bengal. p. 63.*

*Hab. in Zeylona supra arbores, Macrae; in Otaheite, J. Banks; in Indiæ Orientalis agro Napalensi et Sillet. Wallich. (hab. s. sp. e museo Anglo-Indico; etiam e Zeylona.)*

*Planta statura variabili nunc 3-unciali nunc sesquipedali. Folia ensiformia, recta, Iridis cujusdam facie, racemo, nunc longissimo, nunc abbreviato, nutante v. pendulo. Flores numerosissimi, lutei, verticillati, bracteis fimbriatis; quâ notâ semper, quin defloratâ dignoscatur. Sepala arcuè reflexa, ovata, æqualia. Petala minora reflexa. Labellum erectum, marginibus fimbriatis involutis, ita ut primâ fronte integrum videtur (intus barbatum ex Roxb. mss.) Capsulæ parvæ obovatæ angulis 6 elevatis.*

2. *OBERONIA longibracteata*.

*O. foliis rectis ensiformibus racemo nutanti subæqualibus, scapo ancipiti, bracteis subulatis floribus multò longioribus, labello truncato utriusque lobato.*

*Hab. in Zeylona supra rupes, Macrae (hab. s. sp. et v. ic. pict.)*

*O. iridifoliæ similis quâ differt foliis magis carnosissimis, bracteis petalisque integerrimis, floribus non verticillatis, demum labelli formâ. Racemus minus elongatus. Flores virides.*

3. *OBERONIA canescens*. Lindl. in Wall. Cat. no. 1950.

*O. caulescens, foliis ensiformibus angustis subfalcatis, racemo subflexuoso apice evanescente, floribus alternis, labello elongato cuneato bilobo basi carnosissimo obtusè bidentato.*

*Hab. in Napalia; Wallich. (hab. s. sp. e museo Anglo-Indico.)*

4. *OBERONIA anthropophora*. *Lindl. in Wall. Cat. no. 1951.*

O. foliis ensiformibus subfalcatis, spicâ nutante apice evanescente, floribus verticillatis, petalis linearibus, labelli trilobi lobo medio elongato bifido.

Hab. in Tavoy, *Indiæ Orientalis*; *Wallich. (hab. s. sp. e museo Anglo-Indico.)*

Flores minutissimi. Sepala æqualia ovata obtusa. Labellum basi concavum lobis lateralibus brevibus semiovatis acutis.

5. *OBERONIA bicornis*. *Lindl. in Wall. Cat. no. 1949.*

O. foliis brevibus subundulatis ovatis, racemis multifloris nutantibus, floribus subverticillatis, petalis ovatis, labello truncato sublunato basi bicorni, sepalis patentibus lateralibus brevioribus.

Hab. in Sillet, *Indiæ Orientalis*; *Wallich. (hab. s. sp. e museo Anglo-Indico.)*

Herba floribunda, cæspitosa, foliis subundulatis. Racemi numerosi, apice recurvi. Sepalum supremum ovato-lanceolatum, lateralibus multo brevioribus ovatis. Petala minora, ovata, acuta. Labellum breve, cucullatum, truncatum, basi in cornubus duobus membranaceis, utroque costâ mediâ elevatâ ad basin connatâ instructo.

6. *OBERONIA brevifolia*.

O. foliis brevibus ovatis, racemo stricto, labello oblongo basi cucullato apice crenulato, bracteis ovali-lanceolatis ovarii longitudine.

*Epidendrum equitans. Forst! Prodr. n. 316.*

*Cymbidium equitans. Swartz. n. act. Ups. 6. p. 72. Willd. n. 14. Thouars, t. 92.*

*Pleurothallis disticha. Act. Rich. orch. 55. t. 8. f. 1.*

Hab. in *Societatis insulis, Forster*; *Mauritiî et Borboniæ, Thouars. (v. s. in herb. Lambert. a Forstero ipso, et examinavi.)*

Hujus loci procul dubio est *Ep. equitans, Forst.* ut e speciminibus patet in *Herb. Lamb. asservatis*. Cum tamen *C. equitans Herb. Banks.* sit *O. iridifolia, Wallichii* *O. caulescens, Blumii* *O. spatulata*, et folia totius generis sint equitantis, nomen specificum mutare ausus sum.

7. *OBERONIA Myosurus*. *Lindl. in Wall. cat. no. 1947.*

O. foliis carnosius linearibus rectis racemo æqualibus, capsulis sphæricis hexangularibus, floribus . . . . .

*Epidendrum Myosurus. Forst! Prodr. n. 317.*

*Dendrobium Myosurus. Swartz. n. act. Ups. 6. 82. Willd. n. 4.*

Hab. in *Societatis insulis, Forster*; in *Napalia, Wallich. (v. s. in Herb. Banks. et hab. s. sp. e museo Anglo-Indico, omnibus defloratis.)*

Herba parva, vix 4 uncias altitudine attingens, foliorum formâ et racemo brevî præcipuè distinctum floribus ignotis. Folia ferè semper emarginata v. truncata sunt; hoc tamen casu quodam, potiusquam naturâ, accidisse opinor.

8. *OBERONIA spatulata*.

O. "caule simplici folioso, foliis ensiformibus ad medium ferè vaginatis approximatis rectis aut recurvis, labelli limbo spatulato emarginato."

*Blume.*

*Malaxis equitans. Blume p. 395.*

Hab. in truncis arborum Provinciarum occidentalium *Javæ* insulæ, florens Septembri; *Blume.*

9. *OBERONIA lunata*.

O. "foliis paucis ensiformibus basi vaginatis subincurvis, labelli limbo semilunato denticulato, capsulis oblongis." *Blume*.

*Malaxis lunata*. *Blume* p. 394.

Hab. in arboribus sylvarum montis Salak, *Javæ*, florens Octobri Februario; *Blume*.

10. *OBERONIA monstrosa*.

O. "caule simplice lato-folioso, foliis remotis ensiformibus subincurvis, spicâ elongatâ densiflorâ." *Blume*.

*Malaxis monstrosa*. *Blume* p. 395.

Hab. locis umbrosis ad montem Pantjar, *Javæ*, frugens Junio; *Blume*.

"Species singularis *O. equitanti* affinis."

11. *OBERONIA imbricata*.

O. "caule simplice folioso, foliis compressis vaginatis confertè imbricatis, labelli limbo ligulato denticulato." *Blume*.

*Malaxis imbricata*. *Blume* p. 395.

Hab. in sylvis humidis montium Gede, Salak, &c. *Javæ*, florens Septembri Decembri; *Blume*.

12. *OBERONIA microphylla*.

O. "subcaulescens, foliis paucis angusto-ensiformibus basi vaginatis subincurvis, sepalis interioribus erosis, labelli limbo producto rotundato emarginato." *Blume*.

*Malaxis microphylla*. *Blume* p. 395.

Hab. in elatis montis Salak, *Javæ*, florens Junio; *Blume*.

"Flores miniati. Capsulæ triquetræ."

13. *OBERONIA similis*.

O. "foliis paucis ensiformibus basi vaginatis subrectis, labelli limbo semitrifido eroso: lobo medio elongato bifido, capsulis obovato-globosis." *Blume*.

*Malaxis similis*. *Blume* p. 394.

Hab. in arboribus sylvarum montis Salak, *Javæ*, florens Januario, &c. *Blume*.

"Ab *O. lunata* differt foliis angustioribus minus arcuatis, labelli et capsularum forma." *Blume*.

## XI. EMPUSA.

*Empusa*, *Lindl. in Bot. Reg.* 825.—*Empusaria*, *Reichenbach Conspectus* p. 69.

Sepala patentia; lateralia basi inæqualia, cum basi labelli obliquè connata eoque supposita; supremum et petala linearia patentia. Labellum erectum, cucullatum, basi auriculatum, cum columna connatum, bituberculatum, limbo patente indiviso. Columna elongata, semiteres, arcuata, apice utrinque alata. Anthera bilocularis. Pollinia 4, collateralia (oo oo).—Herba epiphyta, foliis membranaceis plicatis, racemo terminali multifloro.

1. *EMPUSA paradoxa*. *Lindley*.

*Malaxis lancifolia*. *Smith! in Rees*.

*Empusa paradoxa*. *Lindl. in Bot. Reg.* 825. *Wall. Cat. Herb. Ind. no.* 1937.

April, 1830.

Hab. supra arbores ad Tokam *Napalia*, etiam in *Kamoon*, *Wallich*. (*hab. s. sp. e museo Anglo-Indico*).

Caulis pedalis et ultra, angulis membranaceis. Folia elliptico-oblonga, plicata, acuminata, 6-8 pollices longa. Racemus terminalis, 5-6 pollices longus, multiflorus. Flores ochroleuci, inodori. Sepala lateralalia semi-ovata, obtusa, obliquè cum basi labelli accreta eoque supposita: supremum lineare duplò longius. Petala linearia reflexa. Labellum retusum cum mucrone.

## XII. PLATYSTYLIS.

*Malaxis* § 2. *Platystylis*. *Blume Bijdr. p. 389. tabell. f. 54.*

Sepala patentia, libera; lateralalia labello supposita, supremo angustiora. Petala filiformia. Labellum ascendens, indivisum, medio sulcatum, etuberculatum. Columna dilatata, compressa, erecta, disciformis, stigmatè marginato. Anthera parva bilocularis. Pollinia 4, collateralia.—Herbæ epiphytæ, habitu *Liparis* veræ.

### 1. PLATYSTYLIS decurrens.

P. "bulbis ovatis compressis, foliis binis lanceolatis carinatis, pedunculo nutante, bracteis ovatis decurrentibus, labello utrinque dente instructo, limbo ovato convexo." *Blume*.

*Malaxis decurrens. Blume p. 390, tab. 54.*

Hab. in truncis arborum ad montem Salak, *Javæ*, florens Maio Octobri; *Blume*.

"Flores dilutè aurantiaci. Sepala margine recurvata, papillosa. Labellum internè glandulâ excavatâ munitum." *Blume*.

### 2. PLATYSTYLIS atropurpurea.

P. "bulbis ovatis compressiusculis vaginatis, foliis binis ovatis, pedunculo erecto pentagono, bracteis lineari-lanceolatis carinatis, labelli limbo emarginato cum mucrone." *Blume*.

*Malaxis atropurpurea. Blume p. 390.*

Hab. in paludosis montis Salak, *Javæ*, florens Octobri; *Blume*.

"Flores atropurpurei, in summo pedunculo conferti; sepala exteriora trinervia; labellum margine ciliolatum." *Blume*.

## XIII. MICROSTYLIS.

*Microstylis*, *Nutt. gen. Amer. 2. 196. Lindl. orch. accl. no. 135.—Crepidium, Blume Bijdr. 387. tabell. fig. 63.*

Sepala patentia, libera; lateralalia basi æqualia, sæpius breviora. Petala patentia, linearia v. filiformia. Labellum patentissimum, cum columnâ angulum rectum formans, basi excavatum, sagittatum v. auriculatum, integerrimum v. dentatum, tuberculis nullis. Columna minima, rarè paululum elongata, apice dentibus s. auribus duabus instructa. Anthera bilocularis. Pollinia 4, collateralia.—Herbæ terrestres v. epiphytæ habitu *Liparis*, foliis plicatis v. membranaceis basi rarè incrassatis. Flores herbacei, nunc flavesecentes v. discolores.

1. *MICROSTYLIS monophyllos.*

*M.* caule unifolio, racemo rarifloro, labello acuminato integerrimo.

*Ophrys monophyllos.* *Linn.*

*Epipactis folio unico, &c.* *Hall. Helv. t. 36.*

*Monorchis ophioglossoides.* *Menzelius pug. t. 5. f. 1. 2.*

*Malaxis monophyllos.* *Willd. no. 4.*

Hab. in *Europæ* paludibus, sylvaticis, alpestribusque; etiam in *America septentrionali* propè *Halifax*; *Gouldie* (*hab. s. sp.*)

Variat foliis binis, *Swartz* in *Fl. Ind. Occ. p. 1443*; quæ *Ophrys bifolia*, *Flora Suecica* 2. 811.

2. *MICROSTYLIS ophioglossoides.* *Nuttall.*

*M.* caule unifolio, racemo obtuso capitato multifloro, labello tridentato. *Lindley* in *Botanical Register*, fol. 1290.

*Malaxis unifolia.* *Michaux.*

*Malaxis ophioglossoides.* *Willd. no. 3. Lodd. Bot. Cab. t. 1116 bona.*

*Microstylis ophioglossoides.* *Nutt. gen. 2. 196.*

β; *mexicana*; caule pedali, racemo densiore, labelli dente mediâ lateralibus minore. *Bot. Reg. t. 1290.*

Hab. in *America septentrionali* ad radices arborum, in *Canada* (*Gouldie*), *Nova Scotia* (*Menzies*), *New Jersey* (*Nuttall*)—β in *Mexico*. (*hab. s. sp.*; β. *hab. s. sp. et v. v. c.*)

Varietas *Mexicana* vix differt nisi staturâ majore; eadem habet folium solitarium oblongum atroviride, eundem racemum depressum quasi umbellatum demum in cylindrum abeuntem, eosdem flores cum eodem labello truncato equitante cujus dens intermedia lateralibus minor.

3. *MICROSTYLIS diphyllus.*

*M.* "foliis duobus ovatis lanceolatisve acutis lævibus, scapo triquetro, labello subrotundo acuminato, acumine lacinias haud superante." *Chamisso.*

*Malaxis diphyllus.* *Chamisso in Linnæus 3. 34.*

Hab. "in turfosis convallium infimorum *Unalaschke* solitariò proveniens;" *Chamisso.*

4. *MICROSTYLIS umbellulata.*

*M.* caule diphylo, foliis ovato-lanceolatis acuminatis margine subundulatis longissimè vaginantibus reticulato-venosis, floribus umbellatis.

*Malaxis umbellulata.* *Swartz! Prodr. p. 119. Fl. Ind. Occ. p. 1444. Willd. no. 2.*

Hab. nemorosa subhumida in montibus altis *Jamaicæ* australis; *Swartz.* (*v. s. sp. in Herb. Banks.*)

Scapus pentagonus. Flores *Microstylis spicatae*. (ex *Swartz*). Inflorescentia *M. ophioglossoidis* junioris.

5. *MICROSTYLIS spicata.*

*M.* caule diphylo, foliis cordatis, scapo tetragono, labelli trilobi lobo medio elongato.

*Malaxis spicata.* *Swartz! Prodr. p. 119. Flora Ind. Occ. p. 1441. t. 28. figg. a. b. c. Willd. no. 1.*

Hab. in locis depressis montium *Jamaicæ*; *Swartz.* (*v. s. sp. in Herb. Banks.*)

Scapus pedalis. Spica 2-3 pollicaris, floribus approximatis magnitudine *Malaxis paludosæ*, pallidè virentes. Capsula tricarinata. *Swartz.*



6. *MICROSTYLIS Wallichii*. Lindl. in Wall. Cat. no. 1938.

*M.* caule folioso, foliis oblongis acuminatis, racemo elongato rarifloro, sepalis oblongo-linearibus, petalis filiformibus supremo brevioribus, labello ovali apice leviter bifido.

Hab. in *Napalia* et *Sillet*, *Indiæ Orientalis*, Wallich. (hab. s. sp. e Museo *Anglo-Indico* benignè communicatum).

In sicco folia semper discoloria, dum in *M. biloba* vicina sunt pallidè viridia. Flores lividi ex icone et schedis Wallichianis.

7. *MICROSTYLIS biaurita*. Lindl. l. c. no. 1941.

*M.* caule folioso, foliis ovato-oblongis acuminatis, racemo denso multifloro, labello acuminato obtuso integerrimo basi bicristato, columnæ alis petaloideis, sepalis lateralibus petalisque secundis.

Hab. in *Pundua*, *Indiæ Orientalis*; Wallich. (hab. s. sp. e Museo *Anglo-Indico*.)  
*Spithamæa*, racemo ultra folia paulò evecto.

8. *MICROSTYLIS biloba*. Lindl. l. c. no. 1940.

*M.* caule folioso, foliis oblongis acuminatis, racemo elongato rarifloro, sepalis oblongis, petalis linearibus truncatis supremo æqualibus, labello ovato apice bilobo: sinu aperto.

? *Malaxis acuminata*. Don. Prodr. 29.

Hab. in *Napalia* et *Ava*, *Indiæ Orientalis*, Wallich. (hab. s. sp. e Museo *Anglo-Indico*.)

Herba gracilis pedalis. Flores verosimiliter flavescentes. *M. Wallichii* valdè affinis characteribus datis abundè diversa.

9. *MICROSTYLIS discolor*.

*M.* caule folioso, foliis ovato-oblongis abruptè petiolatis undulatis plicatis, labello ovato integerrimo basi cucullato, columnâ apice bicorni, sepalis petalisque secundis.

Hab. in pratis apricis ad latera collium *Zeylonæ*, florens Julio; *Macrae*. (hab. s. sp. et v. ic. pict.)

Herba 6 uncias alta, foliis purpureis, floribus luteis in purpureo mutabilibus.

10. *MICROSTYLIS purpurea*.

*M.* caule folioso, foliis ovato-oblongis abruptè petiolatis plicatis, labello bifido acuminato basi longè equitante, sepalis obtusis, petalis linearibus truncatis, columnâ apice apterâ.

Hab. in umbrosis ad ripas fluminum *Zeylonæ*, florens Septembri; *Macrae*. (hab. s. sp. et v. ic. pict.)

Caulis pedalis pentaphyllus, racemo denso ovato, floribus atropurpureis.

11. *MICROSTYLIS flavescens*.

*M.* "foliis ovato-lanceolatis, labello integerrimo." Blume.

*Crepidium flavescens*. Blume p. 388.

Hab. in cacumine montis *Burangrang* Provinciæ *Krawang* insulæ *Javæ*, florens Junio; Blume.

An eadem ac *Microst. discolor*.

12. *MICROSTYLIS versicolor*.

*M. caule folioso, foliis cordato-v. ovato-oblongis abruptè petiolatis undulatis plicatis, labello transverso anticè dentato basi cucullato parum equitante, columnâ apice bicorni, sepalis petalisque secundis.*

*Hab. in India Orientali, Hayne in Museo Anglo-Indico; in pratis apricis ad latera collium Zeylonæ, florens Julio; Macrae. (hab. s. sp. et v. ic. pict.)*

*M. Rheedii valdè affinis, sed distincta staturâ minore, foliorum formâ et florum magnitudine. Illius equidem analysis me fefellit, diversas tamen esse proculdubio existimo. Flores lutei in purpureo mutabiles.*

I do not think there are any materials in this country sufficient for determining exactly what the *Malaxis Rheedii* of Swartz is, or rather the *Basaala Poulou-Maravara* of the Hortus Malabaricus upon which that species was founded. Of a *Microstylis* from India answering to Rheede's figure I have seen no specimen. The *Epidendrum resupinatum* of Forster which is referred to it as a synonym, exists in the Banksian Herbarium, and there is also a drawing of that species in the same collection, and these agree extremely well with the Hortus Malabaricus figure: but they are undoubtedly distinct from *M. versicolor* in their greater size and much larger oblong-lanceolate leaves. Their flowers I have not analysed, but if the *Crepidium Rheedii* of Blume belongs to *Malaxis Rheedii*, which I scarcely doubt, the flowers are essentially distinct also.

13. *MICROSTYLIS Rheedii*.

*M. caule folioso, foliis oblongo-lanceolatis plicatis, labello truncato dentato basi longè equitante.*

*Epidendrum resupinatum. Forst.: fide iconis Forsterianæ in Bibliotheca Banksiana.*

*Malaxis Rheedii. Willd. no. 5.*

? *Crepidium Rheedii. Blume p. 387. f. 63.*

*Hab. in India Orientali, Rheede; in sylvis opacis Java, Blume; in insula Otaheite; Banks. Forster. (v. s. sp. deflor. in Herb. Banks.)*

*Variat foliis purpurascentibus et viridibus. Blume.*

*Obs. Columna apice alata diptera, alis subquadratis, si planta Blumii eadem: specimina in Herb. Banks. deflorata nihil docent.*

† 14. *MICROSTYLIS? macrostachya*.

*Ophrys macrostachya. Llave nov. veg. Mex. 2. 9.*

“*Planta terrestris habitu gracilis. Radix bulbo unico oblongo. Folium unicum, radicale, ovatum, vaginans, uninerve; squamulæ foliaceæ basin amplexantes. Scapus tetragonus, longissimus, erectus. Flores spicati, sessiles, conferti, bracteis linearibus cincti. Perigonium herbaceum, 5-fidum. Segmenta tria exteriora ovata, patentia; duo lateralia angustiora lunulata. Labellum concavum, subrotundum, concolor, obtusè acuminatum. Gynostemium brevissimum. Anthera bilocularis ad apicem. Pollinis massulæ duæ minutissimæ. Stigma non aspectabile.*” *Llave l. c.*

*Hab. in Mexico propè Jesus del Monte, juxta Vallisoletum, florens Augusto; Llave.*

## XIV. DIENIA.

*Dienia*, Lindley in Bot. Reg. 825. Pedilea, Lindl. in Hook. Fl. 115. in notis.  
Orch. accl. no. 144. c. ic.

Sepala patentia, libera; lateralibus basi æqualia sæpius breviora. Petala filiformia patentia. Labellum erectum, basi cum columna accretum, et tuberculatum, nunc concavum membranaceum acutè trilobum, nunc excavatum margine callosum apice trilobum, v. integrum. Columna elongata, semiteres, recta, clavata, cum labello concavo minutissima. Anthera bilocularis. Pollinia 4, collateralia (oo oo).—Herbæ terrestres, foliis basi parum incrassatis, membranaceis, plicatis. Scapus teres v. saltem apterus. Flores parvi, herbacei v. fusci, racemosi, v. spicati, terminaliales, angulis fructus sæpè crispis.

This genus differs from *Liparis* chiefly in the shortness and straightness of the column connected with a three lobed concave erect or excavated lip, which is scarcely recurved about the middle, and which has never any tubercles at its base. The column of *Liparis* is always arcuate. From *Microstylis*, with which it agrees in the shortness of the column, it is distinguished by its lip being parallel with the column, not at right angles with it, and neither sagittate nor cordate at the base.

1. *DIENIA congesta*. Lindley in Wall. Cat. no. 1936.

D. caule folioso, foliis oblongo-lanceolatis acuminatis plicatis, spicâ densâ cylindraceâ, perianthii laciniis secundis, labello oblongo excavato apice calloso tridentato: dentibus obtusis intermedio ovato.

*Malaxis latifolia*. Smith! in Rees.

*Dienia congesta*. Lindl. in Bot. Reg. 825.

Hab. in *Napalia*, Wallich; in *China*, Reeves. (hab. s. sp. e Museo Anglo-Indico; v. ic. pict. sinens. in Bibl. Hort. Soc.)

Planta terrestris pedalis v. ultra. Scapus apice spicatus, floribus luteo viridibus, minutis, densis, in cylindrum collectis. Sepala lineari-lanceolata obtusa; lateralibus a labello recurvis. Petala filiformia patentia. Labellum cum columna parallelum, excavatum, cucullatum, apice callosum tridentatum, dentibus obtusis, intermedio ovato. Columna semiteres excavationis labelli longitudine, apice bialata. Ovarium et capsula angulis membranaceis undulatis.

2. *DIENIA fusca*.

D. caule folioso, foliis oblongo-lanceolatis petiolatis acuminatis plicatis, spicâ densâ ovatâ cylindraceâ, perianthii laciniis secundis, labello subrotundo excavato apice calloso tridentato vix cucullato: dentibus obtusis intermedio conico.

Hab. in *Zeylona* in montibus, *Macrae* (hab. s. sp. et v. ic. pict.)

Priori valdè affinis. Flores fusco-purpurei.

3. *DIENIA cylindrostachya*. Lindl. l. c. no. 1934.

D. caule unifolio, folio ovato obtuso, spicâ densâ cylindraceâ, perianthio explanato, labello excavato apice calloso subintegro, columnâ brevissimâ.

Hab. in *Napalia*, Wallich. (hab. s. sp. e Museo Anglo-Indico.)

Planta habitu *Microstylis monophyllæ* sed floribus densioribus distinguenda. Palmaris v. sesquipedalis. Perianthium explanatum. Sepala ovata

acuta. Petala filiformia. Labellum ovatum, excavatum, basi subcucullatum, apice callosum obtusum obsoletè trilobum. Columna brevissima.

4. *DENIA muscifera*. Lindl. l. c. no. 1935.

D. caule diphylo, foliis latis oblongis obtusis, racemo rarifloro, perianthio explanato, labelli trilobi laciniâ mediâ sepalsque lateralibus acuminatis, columnâ brevissimâ.

Hab. in *Napalia*, Wallich. (hab. s. sp. e Museo Anglo-Indico.)

D. Gmelini valdè affinis sed omnibus partibus major. Pedalis v. sesquipedalis. Folia multò latiora. Racemus rariflorus, aliquando 9 uncias longus. Flores herbacei. Sepala lateralia acuminata ovato-lanceolata: supremum acutum. Labellum posticum, cucullatum, medio tricostatum, margine calloso, dentibus lateralibus abbreviatis, intermedio acuminato. Capsulæ oblongæ, membranacæ, apteræ.

5. *DENIA Gmelini*.

D. caule diphylo, foliis oblongis obtusis, racemo rarifloro, perianthio explanato, labelli trilobi laciniis acutis, columnâ brevissimâ.

Orchis radice subrotunda, labello hastato. Gmelin / sib. 1. 18. t. 4. f. 1. bona.

Hab. in *Sibiria*; Gmelin. (hab. s. sp.)

Sepala ovata acuta. Petala filiformia sepalo supremo æqualia. Labellum cucullatum, posticum, concavum, non excavatum, tridentatum, dentibus acutis: lateralibus multò minoribus. Scapus 9 uncias altus. Flores minutissimi herbacei.

Debeo benevolentiae amicissimi Prescott.

6. *DENIA calycina*.

D. caule monophyllo, folio oblongo obtusiusculo, spicâ elongatâ tereti, sepalis subrotundo-ovatis petalisque linearibus patentibus, labelli nani cuneati trilobi lobis lateralibus incurvis intermedio ovato patente, columnâ brevissimâ.

Ophrys monophyllos. Pavon. in Herb. Lambert.

Hab. in *Mexico*; Pavon. (exam. s. sp. in Herb. Lamb.)

Sesquipetalis, gracilis. Capsulæ obovatæ, obtusangulæ.

7. *DENIA Myurus*.

D. caule folioso, foliis binis inferiore oblongo obtuso: superiore ovato, spicâ densâ cylindricâ, labello ovato excavato integro, petalis filiformibus reflexis.

Pedileæ. Lindl. arch. soci. no. 144. p. 27. c. 1c.

Hab. in *Mexico*; Pavon. (exam. s. sp. in Herb. Lambert.)

Habitus quodammodo *Microstylis ophioglossoidis*. Caulis pedalis. Flores minimi, virides. Pollinia 4, per paria cohærentia, olim malè visa et pro 2 habita; unde genus nostrum spurium *Pedileæ*.

## XV. MALAXIS.

*Malaxis*, Swartz act. Holm. 1800. p. 233. t. 3. P.

Sepala patentia, libera, subæqualia. Petala sepalis duplò minora, conformia.

Labellum posticum, ascendens, concavum, integerrimum, et tuberculatum, petalis conforme. Columna minima, teres, apice utrinque dentata.

*Anthera bilocularis*. Pollinia 4 incumbentia (♂ ♂).—Herbæ paludosa, foliis paucis venosis basi carnosis. Flores racemo stricto dispositi, luteo virides.

Obs. In my Synopsis of the British Flora the number of pollen masses is erroneously said to be 2. Their real number and position were first made known to me by Mr. Bauer's drawings; the position in which the pollen masses lie, one upon the other instead of side by side, gives them the appearance of being 2 instead of four, and caused the error here adverted to.

1. *MALAXIS paludosa*. Swartz.

*Ophrys paludosa*. Linn. *sp. pl.* 1341.

*Malaxis paludosa*. Swartz *l. c.* p. 127. t. 6. f. 2. Willd. *n.* 7. Eng. Bot. 72.

Hab. in paludosis et turfosis Europæ septentrionalis. (*hab. s. sp. et v. v. sp.*)

Quid ?

*M. Brasiliensis*; caule vaginato, foliis lanceolatis coriaceis, racemo spicato, sepalis interioribus angustis, labello trilobo connivente, lobo medio acuto apice subcorneo. *Habitat in Brazil*. Spreng. *syst.* 3. 740.

## XVI. NEPHELAPHYLLUM.

*Nephelaphyllum*, *Blume Bijdr.* 372. tabellen 22.

Sepala et petala linearia, patentissima v. reflexa. Labellum calcaratum, integerrimum, liberum, lineâ mediâ elevatâ, limbo petaloideo cum columna parallelo. Columna semiteres. Anthera carnosâ, triangularis! bilocularis. Pollinia 8, subquadrata.—Herbæ terrestres, subcaulescentes, glabræ, foliis ovatis, petiolatis, plicatis, suprâ nebulosis (unde nomen), subtus purpurascens, pedunculo terminali multifloro, floribus pedicellatis.

Character ex icone et descriptione Blumii.

1. *NEPHELAPHYLLUM tenuiflorum*. Blume.

N. "floribus laxè spicatis cernuis, labello limbo intus rugoso-muricato."  
*Blume l. c.*

Hab. in sylvis altioribus montis Salak insulæ Javæ; Blume.

2. *NEPHELAPHYLLUM pulchrum*. Blume.

N. "floribus densè spicatis, labelli limbo intus lineis tribus muricatis."  
*Blume l. c. t. 22.*

Hab. in locis humidioribus sylvarum Salak insulæ Javæ, florens Januario-Aprili: *Blume*.

## XVII. ACIANTHUS.

*Acianthus*. *R. Br. Prodr.* 1. 321.

Sepala subringentia, acuminatissima, libera: lateralibus labello suppositis. Petala minora acuminata. Labellum liberum, integrum, basi bicallosum, disco nudo. Columna semiteres, clavata. Anthera terminalis, recumbens, bilocularis. Stigma ovatum, transversum. Pollinia 8, ad basin in materie granulosa v. subpulverea solubilia.—Herbæ teneræ, glabellæ. Tuberes indivisi, solitarii, nudi, novello pedicellato. Caulis unifolius,

ad ipsam basin vaginâ brevi inclusus, supernè ebracteatus. Folium profundè cordatum, reticulato-venosum, subtus rufum. Flores racemosi, v. solitarii, rufi.

Character e descriptione R. Brownii, et *Aciantho* exserto.

Genius medium tenens inter *Malaxideas* et *Arethuseas* quoad polliniorum fabricam.

1. *ACIANTHUS* exsertus. R. Br.

A. floribus racemosis, aristis brevissimis, galeâ basi attenuatâ foliolis interioribus horizontaliter reflexis, labello apice papuloso, columnâ exsertâ. R. Brown Prodr. 321.

*Acianthus fornicatus*. Sieber! Fl. N. Holl. n. 159.

Hab. ad Portum Jackson *Novæ Hollandiæ*, R. Brown. Sieber, Caley (hab. s. sp.)

2. *ACIANTHUS* fornicatus. R. Br.

A. floribus racemosis, aristis perianthio quadruplò brevioribus, foliolis interioribus erectiusculis, labello longitudinaliter papuloso, columnâ inclusâ. R. Brown! Prodr. 321.

Hab. ad Portum Jackson *Novæ Hollandiæ*, R. Brown, (hab. s. sp. comm. a celeberr. Brown.)

3. *ACIANTHUS* caudatus. R. Br.

A. scapo 1-2-floro, aristis longissimis, folii marginibus undulatis. R. Brown Prodr. 321.

Hab. ad Portum Jackson *Novæ Hollandiæ*; R. Brown.

4. *ACIANTHUS*? bifolius. R. Br.

A. scapo unifloro, foliis radicalibus binis cucullatis, perianthio mutico, foliolis 3 exterioribus conformibus: lateralibus reflexis, interiorum? lateralibus angusto-linearibus. R. Brown Prodr. 322.

*Epipactis reflexa*. Lab. Nov. Holl. t. 211. f. 1.

Hab. in *Insula Van Diemen*, Labillardière, R. Brown.

Generis dubii sec. cl. Brown, medium tenens inter *Acianthum* et *Chiloglottim* suam, cum illo numero polliniorum conveniens, cum hac foliis radicalibus binis, et sepalis muticis.

## XVIII. CYRTOSIA.

*Cyrtosia*. Blume Bijdr. 396: tabellen 6.

Sepala et petala conniventia. Labellum carnosum, concavum, intùs discoideum, cum columna infernè connexum: limbo rotundato v. emarginato recto. Columna subincurva, supernè dilatata aut subalata. Anthera carnosæ, bilocularis, columnam posticè terminans. Pollinia 2, reniformia, farinosa-pulposa, libera. Capsula siliquæformis, carnosæ. Semina tunicata.—Herbæ terrestres, caulescentes. Radices tuberosæ, conglobatæ, difformes. Caules aphylli, (stipulis instructi!?) Flores spicati, v. paniculati, bracteolati.

Character ex Blume. An potius *Neottia*? An *Vanillæ* et *Epistephio* affinium?

April, 1830.

1. *CYRTOSIA javanica*. *Blume*.C. "caulibus subsimplicibus, labello intus disco hirsuto instructo, limbo rotundato." *Blume l. c. tab. 6.*Hab. in altioribus montium insulæ *Javæ*, florens Augusto; *Blume*.2. *CYRTOSIA altissima*. *Blume*.C. "caulibus ramosis scandentibus (50-70 ped. altitud.) labello intus cristato, limbo semitribo." *Blume l. c.*Hab. in montanis Seribu, insulæ *Javæ*, florens Aprili-Junio; *Blume*.

## XIX. LIPARIS.

*Liparis*, *Rich. orch. Eur.* 30. f. 10.—*Sturmia*, *Reich. conspectus* p. 69. n. 1564.—*Cestichis*, *Thouars orch. Afr.* t. 90.

Sepala patentia, libera; lateralibus basi æqualia sæpius breviora. Petala sepalis angustiora, rarè æqualia, linearia v. filiformia. Labellum ascendens v. erectum, basi cum columna paululum accretum, supra basin sæpius bituberculatum, integrum, nunc mucronibus aliquot sed lobis nullis. Columna elongata, semiteres, incurva, apice marginata. Anthera bilocularis. Pollinia 4, collateralia (oo oo).—Herbæ terrestres v. epiphytæ, foliis basi in pseudo-bulbum concretis, nunc membranaceis plicatis, nunc subcoriaceis venis minùs distinctis. Scapus teres v. angulatus, v. anceps. Flores parvi, herbacei, racemosi, rarè lutei v. albi.

SECT. I. *Folia membranacea, plicata. Plures terrestres.*

## LIPARIS vera.

1. *LIPARIS Rheedii*.L. "bulbis subcylindraceis, foliis pluribus ovato-lanceolatis, pedunculo erecto tetraquetto, bracteis semilanceolatis, limbo rotundato crenulato." *Blume*.*Malaxis Rheedii*. *Blume* p. 389. tab. 54.Hab. in sylvis umbrosis montium Seribu, *Javæ*, florens Februario; *Blume*."Sepala margine reflexa, sordidè purpurascens; labellum luteum; gynostemium purpurascens. Folia membranacea." *Blume*.2. *LIPARIS nervosa*.L. foliis pluribus ovato-oblongis undulatis acutis racemo sparso paucifloro brevioribus, scapo angulato, floribus longè pedunculatis cernuis, labello cuneato (ovato sulcato emarginato *Th.*) retuso basi bicalloso.*Ophrys nervosa*. *Thunb. Jap.* 27.*Epidendrum nervosum*. *Thunb. ic. pl. Jap.* t. 10.*Malaxis nervosa*. *Swartz act. Holm.* 1800. p. 235. *Willd.* n. 10.Hab. in *Japonia*, juxta *Osacca* et *Jedo*, florens Junio et Maio; *Thunberg*; in *China*; *Reeves*. (v. *ic. pict. sinens. in. Bibl. Hort. Soc.*)

Flores purpurei. Folia palmaria.

† 3. *LIPARIS odorata*.

L. foliis oblongo-lanceolatis plicatis, racemo erecto multifloro, scapo trigono, labello ovato concavo, floribus flavo-viridibus.

*Katou pounam marawara*. *Rheede mal.* 12. p. 55. t. 28.*Malaxis odorata*. *Willd.* n. 6.

Hab. in *India Orientali*; Rheede.

This is an obscure plant of which no modern botanist seems to have seen a specimen. It is, if correctly described, distinguishable from *L. elata* by its flowers being sweetscented and yellowish green, with an ovate lip.

4. *LIPARIS elata*. *Lindley*.

*L. foliis pluribus oblongis acutis plicatis racemo erecto multifloro brevioribus, scapo angulato, labello obovato retuso basi bicalloso purpureo, sepalis herbaceis lateralibus oblique recurvis.*

*Cymbidium?* *veratrifolium*. *Wallich in iconibus Musei Anglo-Indici no. 634.*

*Liparis bituberculata*. *Lindl. in B. Reg. 882.*

*Cymbidium?* *bituberculatum*. *Hooker Exot. Fl. t. 116. (pollinis erroneis.)*

*Liparis elata*. *Lindley in Bot. Reg. t. 1175.*

Hab. in *India Orientali*, *Wallich*; etiam in *Brazilia* (v. v. cult.)

I was formerly of opinion that the Brazilian and Indian plants were different; but more recent observation and the inspection of Dr. Wallich's Indian drawings have induced me to combine them. I presume there is no doubt of the plant in the Garden of the Horticultural Society, from which *L. elata* was originally described, being really of Brazilian origin; and yet it is undoubtedly possible that there may have been some transposition of labels. I do not adopt the older specific name of *bituberculatum* because it is expressive of a character common to every species of the genus.

5. *LIPARIS olivacea*. *Lindl. in Wull. cat. no. 1942.*

*L. foliis binis v. solitariis subrotundis cordatis, v. oblongis acuminatis plicatis racemo erecto multifloro brevioribus, scapo basi tereti, labello obovato retuso cum mucrone basi bicalloso, sepalis obtusis: lateralibus labello suppositis.*

Hab. in *Napalia*, *Wallich*. (*hab. s. sp. e Museo Anglo-Indico benignè communicatum et v. ic. pict.*)

Pseudo-bulbus ovatus vaginis obtusis tectus. Folia 1 v. 2, sessilia, in icone cordata subrotunda acuta, in exemplare angustiora. Scapus angulatus, foliis multo longior. Racemus multiflorus. Flores olivacei. Sepala obtusa; lateralibus labello supposita, patentia. Petala subulato-lineariter, acuta. Labellum subrotundum, cuneatum cum mucrone, basi bicallosum. Columna apice alata, basi labello accreta.

6. *LIPARIS barbata*.

*L. foliis binis oblongis acuminatis plicatis racemo paucifloro subcorymboso subæqualibus, labello cuneato barbato basi sulcato.*

Hab. in pratis ad latera collium *Zeylonæ*, florens Novembri, *Macrae*. (*hab. s. sp. et v. ic. pict.*)

Herba pusilla, 4-uncialis, caulibus carnosius fusiformibus teretibus vaginatis. Folia 3, oblonga, acuminata, venosa. Racemus subcorymbosus foliis brevior. Flores virides. Columna apice aptera v. levissimè tantum marginata.

*L. purpurascens* valdè similis.

7. *LIPARIS purpurascens*. *Lindley*.

*L. foliis 2-3 cordatis ovatisve acutis undulatis plicatis racemo corymboso paucifloro subæqualibus, labello subrotundo dentato emarginato.*



*Ophrys salassia.* *Herb. Commers. sec. A. Rich.*

*Malaxis purpurascens.* *Thouars orch. Afr. tt. 26. 27.*

*Liparis purpurascens.* *Lindl. in Bot. Reg. 882. A. Rich. orch. Maur. p. 53.*

Hab. in insulis *Borboniæ* et *Mauritii*, Thouars, A. Richard.

Planta humilis, 3-uncialis, caule squamulis aliquot vestito. Flores purpurascens. Fructus obovatus, costatus, corymbosus.

8. *LIPARIS atropurpurea.*

*L. foliis* 2-3 subrotundis acuminatis petiolatis plicatis basi obliquis cucullatis racemo erecto rarifloro subæqualibus, scapo tereti, labello oblongo obtuso recurvo crenulato, sepalis lateralibus oblongo-lanceolatis obliquis, petalis longissimis filiformibus.

Hab. in *Zeylona*, *Macrae*, (*hab. s. sp.*)

Species pulcherrima *L. napalensi* valdè affinis, floribus atropurpureis, foliis basi cucullatis, et labelli formâ, distinctissima.

9. *LIPARIS napalensis.* *Lindley.*

*L. foliis* binis cordatis acuminatis petiolatis plicatis racemo erecto rarifloro paulo longioribus, scapo angulato, labello maximo recto cucullato oblongo acuminato, sepalis petalisque linearibus patentibus.

*Malaxis cordifolia.* *Smith! in Rees.*

*Liparis nepalensis.* *Lindl. in Bot. Reg. 882. Spreng. no. 4.*

*Acianthus petiolatus.* *Don Prodr. nep. p. 28.*

Hab. supra rupibus saxisque Sheopore montis *Napaliæ*, florens Junio; *Wallich.* (*hab. s. sp. e Museo Anglo-Indico.*)

Flores virides.

10. *LIPARIS liliifolia.* *Richard.*

*L. foliis* binis oblongis acutis plicatis racemo multifloro multò brevioribus, scapo angulato, labello maximo obovato mucronato recurvo discolore, sepalis linearibus patentissimis.

*Ophrys liliifolia.* *Linn. sp. pl. 1341. Bot. Rep. 1. 65.*

*Malaxis liliifolia.* *Swartz act. Holm. 1800. p. 235. Willd. n. 8. Bot. Mag. t. 2004.*

*Liparis liliifolia.* *Rich. orch. Eur. Lindley in Bot. Reg. 882.*

Hab. in *America septentrionali* (*hab. s. sp. et v. v. cult.*)

Flores labello magno petalisque filiformibus purpurascens. Capsula obovata, costata.

11. *LIPARIS Löselii.* *Richard.*

*L. foliis* binis ovato-oblongis obtusis plicatis racemo paucifloro multo brevioribus, scapo angulato, labello ovato integerrimo concolore, sepalis petalisque linearibus inæqualibus.

*Ophrys Löselii.* *Linn. sp. pl. 1341. Eng. Bot. t. 47.*

*Malaxis Löselii.* *Swartz act. Holm. 1800. p. 235. Willd. n. 9.*

*Liparis Löselii.* *Rich. orch. Eur. Lindl. in B. Reg. 882. Synopsis Br. Fl. 1. 263.*

*Ophrys paludosa.* *Fl. dan. t. 877.*

*Ophrys liliifolia.* *Huds. Angl. 389.*

β? *Malaxis correana.* *Barton Prodr. Fl. Philad. p. 86. Nuttall 2. 196.*

*Liparis correana.* *Spreng. syst. 3. 740.*

Hab. in turfosis *Europæ borealis*; in *Canada*, *Gouldie.* (*hab. s. sp.*)

I have the *Malaxis Correana* from Canada, gathered by Mr. Gouldie, and I find no difference between it and our European *Liparis Löselii*.

12. *LIPARIS flavescens*. *Lindley*.

L. foliis binis oblongis petiolatis plicatis planis racemo 2-4-floro corymboso brevioribus, scapo flexuoso, bracteis ovatis, labello ovato integerrimo, sepalis lateralibus ovatis : supremo petalisque filiformibus.

*Malaxis flavescens*. *Thouars orch. Afr. t. 25*.

*Liparis flavescens*. *Lindley in Bot. Reg. 882. A. Rich. orch. Maur. p. 51*.

Hab. in *Mauritio et Borbonia* ; *Thouars, Neraud*.

Flores flavi.

13. *LIPARIS montana*.

L. "bulbis ovatis compressis vaginatis 1-2-phyllis, foliis petiolatis ovato-lanceolatis, pedunculo erecto sulcato, bracteis lineari-subulatis, limbo obtuso cum mucrone." *Blume*.

*Malaxis montana*. *Blume p. 388*.

Hab. in umbrosis montis ignivomi Gede, insulæ *Java*, florens Junio ; *Blume*.

"Flores in summo pedunculi conferti, dilutè purpurascentes. Sepala margine reflexa, limbo ciliolato. Folia membranacea. Variat bulbis subnullis, floribus laxè racemosis, limbo nudo." *Blume*.

14. *LIPARIS plantaginea*.

L. pseudo-bulbis ovatis vaginatis, foliis 1-2 oblongis acuminatis plicatis racemo brevioribus, scapo marginato, labello ovato subundulato obtuso basi bicalloso, bracteis acuminatis ovarii longitudine.

*Cymbidium* ? *plantagineum*. *Wallich in iconibus Musei Anglo-Indici n. 633*.

Hab. in *India Orientali* ; *Wallich. (v. iconem.)*

Flores virides. Sepala lineari-oblonga obtusa subæqualia et petala filiformia patentia.

15. *LIPARIS tradescantifolia*.

L. "bulbis compressiusculis vaginatis 1-phyllis, foliis ovatis discoloribus, bracteis minutis ovatis, labelli limbo ovato integerrimo." *Blume*.

*Malaxis tradescantifolia*. *Blume p. 389*.

Hab. in umbrosis montanis *Salak, Java*, florens Octobri ; *Blume*.

"Sepala subæqualia, patentia ; labellum sepalis paulò latius, basi callosum. Antheræ loculis subdisjunctis. Folia membranacea." *Blume*.

16. *LIPARIS Clypeolum*.

L. folio solitario horizontali suborbiculato basi cucullato apice reflexo acuto racemo erecto multò brevior, labello maximo orbiculato.

*Epidendrum Clypeolum*. *Forst. Prodr. n. 323*.

*Cymbidium Clypeolum*. *Willd. n. 22*.

Hab. in insula *Otaheite* ; *Forster. (v. s. sp. et iconem Forsterianam in Bibliotheca Banksiana.)*

Obs. Foliis magnis suborbiculatis solitariis spicâ paulò brevioribus insignis.

SECT. II. *Folia subcoriacea, non plicata. Rachis sæpius alata. Plures epiphytæ, scapis ancipitibus.*

CESTICEIS, *Thouars*.

17. *LIPARIS foliosa*. *Lindley*.

L. foliis pluribus oblongo-lanceolatis acutis racemis rarifloris subæqualibus.

scapo subancipiti, bracteis subulatis, labello oblongo obtuso recurvo, sepalis petalisque æqualibus reflexis, clinandrio marginato.

*Liparis foliosa.* Lindl. in *B. Reg.* t. 882. Lodd. *Bet. Cab.* 1097. *Hooker Bot. Mag.* t. 2709. *A. Rich. orch. Maur.* p. 52.

*Liparis? reflexa.* Lindl. l. c.

*Cymbidium reflexum.* R. Br. *Prodr.* 331.

Hab. in *Mauritio*, et *Nova Hollandia* ad Portum Jackson. (v. v. cult.)

Obs. In planta Mauritiana inveni clinandrium integrum, in Australasica dentatum, alioquin discrimen nullum.

#### 18. *LIPARIS longipes.* Lindl.

*L. pseudo-bulbis* longissimis teretibus diphyllis, foliis ensiformi-lanceolatis racemo stricto multifloro brevioribus, scapo ancipiti, labello ovato acuto ecalloso columnæ longitudine, sepalis ovatis, petalis linearibus. Lindl. in *Wall. Pl. As. Rar.* vol. 1. p. 31. t. 35.

Hab. supra saxa ad ripas fluminum montium *Zeylonæ*, florens Novembri : *Macrae* ; in montibus *Bengalia orientalis*, Wallich. (hab. s. sp. et v. ic. pict.)

*Pseudo-bulbi* subcylindracei, teretes. Folia oblongo-lanceolata acuta. Racemus erectus foliis paulò longior, densus, multiflorus. Flores pallidè herbacei. Sepala lateraliter ovata, supremum oblongum, patentia ; petala linearia. Columna elongata, erecta, apice alata. Labellum erectum, ovatum, carnosum, glabrum, a columna omnino liberum, tuberculis obsoletis.

Obs. Planta *Bengalensis* nullo modo diversa videtur nisi floribus albis labello luteo ; fortè icon mea *Zeylanica* minus accuratè depicta.

#### 19. *LIPARIS elegans.* Lindl. in *Wall. cat. no.* 1943.

*L. pseudo-bulbis* elongatis diphyllis basi vaginis suberoso-carnosis vestitis, foliis spatulato-lanceolatis acuminatis racemo stricto multifloro æqualibus, scapo basi rachique teretibus, labello cuneato truncato crenulato basi bicalloso, sepalis oblongis obtusis patentibus.

Hab. in *Pinang, Indiæ Orientalis* ; Wallich. (hab. s. sp. e Museo Anglo-Indico.)

Planta pedalis, verosimiliter epiphyta. Radices lanuginosæ. Pseudobulbi aliquando 4 uncias longi. Folia erecta in basi valdè attenuata. Flores aurantiaci (ex Wall). Petala filiformia. Capsulæ pendulæ, pyriformes, glabræ, costis 6 obsoletis.

*L. crenulatæ* valdè affinis ; an diversa ? Bracteæ non ovarii longitudine sed brevissimæ, nec labellum emarginatum sed truncatum cuneatum.

#### 20. *LIPARIS crenulata.*

*L.* "foliis in bulbo oblongo compresso geminatis ternisve lineari-lanceolatis acuminatis, pedunculo longitudine foliorum, bracteis longitudine ferè ovarii lanceolatis, limbo labelli emarginato crenulato." Blume.

*Malaxis crenulata.* Blume p. 393.

Hab. in convallibus montis *Gegar-bentang, Javæ*, florens Maio ; Blume.

"Flores aurantiaci ; affinis *M. (Lipari) odoratæ*."

#### 21. *LIPARIS latifolia.*

*L.* "folio in bulbis oblongis compressiusculis solitario lato lanceolato acuto, pedunculis folio longioribus, bracteis ovatis adpressis parvis, labelli limbo bilobo crenulato." Blume.

*Malaxis latifolia.* Blume p. 393.

Hab. in Provinciæ Bantam regionibus montanis, ad montem Pantjan Provincia Buitenzorg, *Javæ*, florens Junio Augusto; Blume.

"Flores aurantiaci; *L. crenulatæ* maximè affinis."

22. *LIPARIS angustifolia.*

*L.* "foliis in bulbo ovato-oblongo solitariis angusto-lanceolatis, pedunculo erecto apice paucifloro longitudine foliorum, bracteis lineari-subulatis, labelli limbo obtuso." Blume.

*Malaxis angustifolia.* Blume. p. 393.

Hab. ad truncos arborum in montanis Salak et Gede, *Javæ*, florens Februario; Blume.

"Flores pallidè flavi."

23. *LIPARIS viridiflora.*

*L. pseudobulbis* ovatis, foliis binis obovato-lanceolatis racemo multifloro nutante duplè brevioribus, scapo ancipite, rachi alata, labello ovato undulato obtuso ecalloso, bracteis subulatis floribus longioribus v. æqualibus.

*Malaxis viridifolia.* Blume p. 392.

Hab. supra arbores et saxa sylvarum *Zeylonæ*, florens Novembri, *Macrae*; in sylvis *Javæ*, Blume (*hab. s. sp. et v. ic. pict.*)

Pseudo-bulbi ovati, compressi. Folia obovato-lanceolata, acuta, racemo nutante duplè breviora. Bracteæ subulatæ floribus longiores. Flores virides. Sepala subæqualia ovata patentia. Petala linearia reflexa. Labellum ovatum undulatum obtusum.

24. *LIPARIS affinis.*

*L.* "foliis in bulbo ovato-oblongo solitariis lanceolato-linearibus infernè canaliculatis, pedunculo nutante foliorum longitudine, bracteis subulatis, labelli limbo rotundato." Blume.

*Malaxis affinis.* Blume p. 392. tab. 54.

Hab. in sylvis propè Lebak Provinciæ Bantam, *Javæ*, florens Junio; Blume.

25. *LIPARIS parviflora.*

*L.* "foliis in bulbo ovato oblongo compressiusculo geminatis lanceolatis basi carinatis, pedunculis (folio duplè longioribus) nutantibus teretibus, bracteis subulatis, labelli limbo angusto emarginato." Blume.

*Malaxis parviflora.* Blume p. 392.

Hab. ad montem Salak, *Javæ*, florens Decembri; Blume.

"Flores lutei, labelli limbo coccineo." Blume.

26. *LIPARIS pallida.*

*L.* "foliis in bulbo oblongo compressiusculo vaginato solitariis lanceolatis, bracteis lineari-lanceolatis remotis, labelli limbo rotundato-retuso crenulato." Blume.

*Malaxis pallida.* Blume p. 391.

Hab. suprà arbores excelsas fluvii Tjapus in montosis Salak, *Javæ*, florens Septembri; Blume.

"Flores olivacei."

27. *LIPARIS minima*.

*L.* "folio in bulbis (seriatis ovatis compressiusculis) lineari-lanceolato, pedunculo folium æquante compresso, floribus laxè spicatis distichis, capsulis triquetris." *Blume*.

*Malaxis minima*. *Blume* p. 391.

Hab. in arboribus ad montem Salak, ut etiam in montosis Pantjar, *Javæ*, florens Maio; *Blume*.

Affinis *Lipari cæspitosæ* sec. *Blume*.

28. *LIPARIS cæspitosa*. *Lindley*.

*L.* foliis lanceolatis in pseudo-bulbis ovatis solitariis longitudine racemi rariflori, scapo tereti, labello lanceolato recurvo, sepalis petalisque acutis reflexis.

*Malaxis cæspitosa*. *Thouars* t. 90.

*Liparis cæspitosa*. *Lindl.* in *B. Reg.* 882. *A. Richard orch. Maur.* p. 53.

Hab. in *Mauritio* et *Borbonia*; *Thouars*.

Flores minuti virescentes.

29. *L. luteola*. *Lindl.* in *Wall. cat. no.* 1944.

*L.* pseudo-bulbis minimis vaginatis, foliis geminis lineari-lanceolatis racemo flexuoso paucifloro brevioribus, scapo tereti, labello obovato retuso in columna apice alata incumbente: callo unico baseos obsoleto, bracteis ovatis acuminatis decurrentibus, pedicellis capillaribus floribus multoties longioribus.

Hab. in montibus Pundua, *Indiæ Orientalis*, *Wallich* (hab. s. sp. e Museo Anglo-Indico.)

Planta parva gregaria inter muscos vegetans. Racemi 5-6-flori, foliis paulò evectiores; rachi tereti flexuosâ. Sepala lineari-oblonga, obtusa et petala filiformia, patentia. Labellum posticum, ungue columnæ parallelo, limbo recurvo, venis 5 simplicibus collateralibus in medio, unicâ utrinque distante venulas versus marginem hinc pectinatim emittente.

30. *LIPARIS compressa*.

*L.* "foliis in bulbo ovato compressiusculo solitariis lanceolato-linearibus basi carinatis, pedunculo compresso, bracteis bifariâ imbricatis (pectinatis), limbo orbiculato retuso cum mucrone." *Blume*.

*Malaxis compressa*. *Blume* p. 390. tab. 54.

Hab. in sylvis altioribus Provinciarum Buitenzorg, Bantam et Tjanjor, *Javæ*, florens Septembri; *Blume*.

"Flores aurantiaci." *Bl.*

31. *LIPARIS mucronata*.

*L.* "foliis in bulbis (remotis ovatis) compressiusculis solitariis lanceolato-linearibus acuminatis basi carinatis, bracteis in summo pedunculi bifariâ imbricatis carinatis, labelli limbo angusto semi-bifido cum mucrone intermedio." *Blume*.

*Malaxis mucronata*. *Blume* p. 391.

Hab. in sylvis montanis Provinciarum Bantam et Buitenzorg, *Javæ*, florens Junio; *Blume*.

"Flores flavo-virentes, parvi, nutantes. Affinis *Malaxi distichæ Thouarsii*." *Blume*.

32. *LIPARIS gregaria*.

*L. foliis ensiformibus acutis in pseudo-bulbis ovatis solitarii, scapo ancipiti, rachi alatâ, bracteis distichis carinatis pectinatis, labello truncato, sepalis reflexis, petalis erectis.*

*Malaxis disticha. Thouars t. 89.*

*Liparis disticha. Lindley in B. Reg. 882. A. Rich. orch. Maur. p. 54.*

*Stelis micrantha. Sieber. Herb. Maur. n. 168.*

*Hab. supra rupes in sylvis montium Zeylonæ, florens Novembri; Macrae; Mauritio, Sieber; Borbonia, Thouars. (habeo s. sp. et v. iconem pictam.)*

*Rhizoma articulatum, annulatum, intricatum, pseudo-bulbos plurimos gregarios promens. Spicæ lanceolatæ, bracteis ovatis acuminatis. Flores viridi-lutei; sepala lateraliter ovata acuta labello supposita; supremum reflexum; petala linearia erecta. Clinandrium marginatum cavum, anticè bilobum cum mucrone.*

*Obs. Epidendrum biflorum, König Mss. in Zeylona lectum, fortè hujus loci. Planta Zeylanica a Mauritiano Herbarii Sieberiani n. 168 nullo modo differt; labellum tamen hujus secundum auctores celeberrimos suprâ citatos tridentatum, dum in nostra certissimè truncatum dente nullo, nisi sic angulos truncaturæ dicas.*

I formerly called this by the specific name given to it by M. Du Petit Thouars under the genus *Malaxis*, being at that time unacquainted with any others with the same remarkable distichous inflorescence. More being now known, I avail myself of the privilege which an author undoubtedly possesses of altering his own names if he thinks fit, although no one else can be suffered to do it for him.

\* *LIPARIS spuria*.

33. *LIPARIS setæformis. Lindl. in Wall. Cat. no. 1946.*

*Hab. supra arbores Zeylonæ, Macrae; Attran Martabanicæ, et Tavoy Indiæ Orientalis, Wallich. (hab. s. sp. e Museo Anglo-Indico et Zeylond, et v. ic. pict. sine fl.)*

*Planta epiphyta caulibus teretibus ramosis subancipitibus radices plurimos longissimos intricatos undique promens, pseudo-bulbo nullo. Folia disticha, coriacea, oblonga, v. oblongo-lanceolata, obtusa, decidua. Racemi oppositifolii, foliis longiores, pedunculo angulato non ancipiti, rachi alatâ, bracteis falcatis, ovatis, carinatis, distichis, pectinatis, in rachi decurrentibus. Florem unicum tantum vidi mutilum, cui quantum videre licuit, sepala ovata succulenta libera patentia venis 7 subsimplicibus, petala conformia paulò minora, labellum truncatum trilobum lobo medio apice calloso, callo altero luteo intra-apiculari, denique columna libera, fortè basi producta antherâ ovatâ biloculari, pollinibus 4 angustis collateralibus liberis.*

This singular plant when properly examined will possibly be found distinct from the genus in which it is now placed; all that I have been able to ascertain satisfactorily, from the inspection of a single mutilated flower, is that the pollen masses are as I have described them, and that the plant belongs to *Malaxidæ*. The peculiar winged rachis and carinate bractæ forming a kind of pectinated inflorescence is exactly that of *L. gregaria*, *disticha* and some others; but the plant differs from them in having no tendency to form bulb-like stems, in room of which it has the taper woody rooting stems and coriaceous distichous leaves of *Aerides* and its allies.

## XX. DENDROCHILUM.

*Dendrochilum. Blume Bijdr. 398. tabellen 52.*

Sepala et petala æqualia, libera, patentia. Labellum integerrimum, sepalis subconforme, basi concavum v. carinatum, nunc cristatum. Columna brevis, semiteres, anticè processibus duobus cornua referentibus, apice dentata v. rostrata. Anthera infra apicem inserta, bilocularis, valvis nullis anticis. Pollinia 4, libera (♂ ♂) incumbentia.—Herbæ supra arbores vigentes, foliis coriaceis in pseudo-bulbis sæpius solitariis. Spicæ terminales aut laterales, filiformes, multifloræ. Flores juniores bracteis bifariam imbricatis occulti.

Character ex Blume.

SECT. I. "Bulbi remoti; spicæ laterales; sepala linearia; labellum parvum elasticè affixum; gynostemium apice attenuatum emarginatum." *Blume.*

1. *DENDROCHILUM aurantiacum. Blume.*

D. "bulbis oblongis, labello carinato edentulo." *Blume l. c.*

Hab. in truncis arborum montium Gede, Salak, &c. insulæ Javæ, florens Februario Augusto; *Blume.*

"Flores aurantiaci suaveolentes."

2. *DENDROCHILUM occultum.*

D. pseudo-bulbis subquadratis, foliis oblongis emarginatis, bracteis maximis quadrifariam imbricatis floribus occultantibus, labello lineari fimbriato.

*Bulbophyllum occultum. Thouars orch. Afr. tt. 93. 94. A. Rich. orch. Afr. p. 64.*

Hab. in insulis Borboniæ et Mauritii; Thouars.

Flores fusci. Huc retuli ad mentem cel. Blumii.

3. *DENDROCHILUM pallideflavens. Blume.*

D. "bulbis ovalibus, labello carinato edentulo, gynostemii laciniis lateralibus scabris." *Blume l. c. t. 52.*

Hab. in montanis Pantjar insulæ Javæ, florens Julio; *Blume.*

"Planta tenera, pedunculis tetragonis spicato-laxifloris. Flores pallidè flaventes."

SECT. II. "Bulbi consociati; spicæ ex apice bulborum ortæ; sepala oblonga labello subæqualia; gynostemium apice truncatum erosum." *Blume.*

4. *DENDROCHILUM edentulum. Blume.*

D. "bulbis oblongis subulatisve, labello integerrimo internè 1-callosa, gynostemii laciniis lateralibus medio æqualibus." *Blume l. c.*

Hab. in altis montis Salak, insulæ Javæ, florens Februario Julio; *Blume.*

"Flores flavo-virentes."

5. *DENDROCHILUM cornutum. Blume.*

D. "bulbis fusinis, labello basi denticulato internè 2-callosa, gynostemii laciniis lateralibus elongatis." *Blume l. c.*

Hab. in montosis Provinciarum Buitenzorg et Tjanjor, insulæ Javæ, florens Septembri Februario; *Blume*.

“Flores virentes.”

6. *DENDROCHILUM simile*. *Blume*.

D. “bulbis ovali-oblongis, labello internè denticulato internè bilineato, gynostemii laciniis lateralibus medio æqualibus.” *Blume l. c. tab. 53*.

Hab. cum D. cornuto in insula Javæ, florens omni tempore; *Blume*.

“Flores pallidè virentes.”

7. *DENDROCHILUM abbreviatum*. *Blume*.

D. “bulbis ovali-oblongis, labello basi utrinque dente reflexo instructo internè bicalloso, laciniis gynostemii lateralibus abbreviatis.” *Blume l. c.*

Hab. in montanis Provinciarum occidentalium insulæ Javæ, florens toto anno; *Blume*.

“Flores virescentes.”

## XXI. OTOCHILUS.

Sepala et petala æqualia, libera, patentia. Labellum trilobum, lobis lateralibus auriformibus basin columnæ amplexantibus, intermedio patente elongato sepalis conformi, cristis nullis. Columna elongata, clavata, semiteres. Anthera terminalis, bilocularis, septo medio bipartibili, et hinc bivalvis, valvis anticis et posticis medio septiferis. Pollinia 4, incumbentia (♂♂), ad basin materie granulosa cohærentia.—Herbæ supra arbores repentes, rhizomate destitutæ, sed pseudo-bulbis semper e latere apicis suæ soboliferis. Racemi multiflori e latere pseudo-bulborum, basi vaginati. Stigma labio superiore ovato producto.

Genus *Cœlogyni* affine, columnâ immarginatâ, antherâ terminali, dehiscentiâ antheræ, et structurâ labelli diversum.

1. *Otochilus alba*. *Lindl. in Wall. Cat. no. 1967*.

O. pseudo-bulbis ovalibus imbricatis, foliis lanceolatis subplicatis, racemis e vaginis foliaceis verrucosis erumpentibus, bracteis oblongis, sepalis petalisque acutis.

*Broughtonia pendula*. *Wallich in icon. Bibl. Anglo-Indicæ n. 643*.

Hab. supra arbores *Napaliæ*, indeque in hortum Botanicum Calcuttæ allata, Aprili floret, *Wallich*. (*hab. s. sp. e Museo Anglo-Indico et v. ic. pict.*)

Rhizoma nullum sed pseudo-bulbi e lateribus suis hinc proliferi. Flores albi inodori. Labellum basi flavum. Alabastra ovata. Columna virescens.

2. *Otochilus fusca*. *Lindl. l. c. no. 1969*.

O. pseudo-bulbis elongatis fusiformibus, foliis lineari-lanceolatis, bracteis linearibus, sepalis petalisque obtusis.

*Broughtonia? amœna*. *Wall. in ic. Bibl. Anglo-Indicæ n. 642*.

Hab. supra arbores *Napaliæ*, inde in Hortum Botanicum Calcuttæ introducta, ubi floret Januario, *Wallich*.

Vaginæ racemi breves. Racemus densus, multiflorus, nutans. Rachis ovaria bracteæ et columna fuscæ. Labelli aures dilutè roseæ. Alabastra obovata. Pseudo-bulbi digiti crassi, 6-8-pollicares. Flores odoratissimi ex *Wall*.



3. *Otocilus porrecta*. *Lindl. l. c. no. 1968.*

*O. pseudo-bulbis elongatis fusiformibus, foliis oblongo-lanceolatis plicatis, bracteis linearibus, sepalis petalisque acutis.*

*Hab. in Pundua Indiæ Orientalis, Wallich. (hab. s. sp. e Museo Anglo-Indico.)*

*Præcedenti simillima, at characteribus datis diversa. Aures labelli obscure denticulatæ. Pollinia non vidi.*

## XXII. CÆLIA.

*Sepala distincta, æqualia, patentia. Petala subæqualia paulò minora. Labellum integerrimum, unguiculatum, cum basi columnæ continuum, (nec articulatum). Columna nana cum ovario continua, basi leviter producta. Antheræ loculi 2, per connectivum tenue tantum cohærentes, ovati, inappendiculati. Pollinia 4, per paria cohærentia, oblonga, æqualia: pare utroque extùs convexo intùs cavo. Ovarium 9-alatum.—Herba epiphyta acaulis, foliis plicatis et scapo radicali e squamis semicoriaceis erumpentibus.*

I learn the very curious structure of this plant from a beautiful sketch of Mr. Bauer's. Its peculiarity consists in its anther having its lobes connected by only a narrow slight connectivum, so that it is twolobed, and in the pollen masses being concave and convex so that each pair forms a sort of hollow body narrower at the back than at the front, at which end it is open. The placentary angles of the ovarium are larger than the rest and simple, while the intermediate ones are smaller and double.

1. *CÆLIA Bauera*na.

*Epidendrum tripterum. Smith ic. pict. 14. t. 14.*

*Cymbidium tripterum. Swartz n. act. Ups. 6. p. 70. Willd. n. 2. Hort. Kew. ed. 2. 5. 214.*

*Hab. in Jamaica (habeo s. cult.)*

## XXIII. PHOLIDOTA.

*Pholidota. Lindley in Hooker Exot. fl. t. 138. (Januario 1825).—Ptilocnema. Don Prodr. nep. 33. (Febr. 1825).—Crinonia. Blume Bijdr. p. 338. t. 41.*

*Flores subglobosi. Sepala æqualia, distincta. Petala minora. Labellum cucullatum ventricosum, trilobum v. indivisum, cum columna parallelum. Columna cum ovario continua, semiteres v. alata: clinandrio cucullato. Anthera bilabiata! 2-v. 4-valvis. Pollinia 4, globosa, distincta.—Herbæ epiphytæ rhizomate v. carnoso articulo v. pseudo-bulbifero. Folia plicata. Spicæ terminales sæpius imbricatæ et nutantes.*

In this genus there are some species in which the rhizoma has spurious bulbs, and others in which, in lieu of these bodies, the joints of the rhizoma themselves become fleshy. The anther is not formed upon the usual plan of Orchideæ. Instead of the valves opening by two slits along the face of each lobe of the anther, these lobes are combined and the whole face of the anther separates from the back, on which account I have called it bilabiate. The same thing appears to happen in some of Blume's *Cheilonantheras*.

1. *PHOLIDOTA imbricata*. *Lindley.*

*P. pseudo-bulbis ovato-oblongis obtusis subangulatis, foliis solitariis ob-*

longo-lanceolatis plicatis acutis, spicis pendulis foliorum longitudine, bracteis membranaceis concavis imbricatis, sepalis lateralibus ovatis carinatis, labello subgloboso cucullato: lobis lateralibus parvis erectis; intermedio bilobo cordato.

*Pholidota imbricata.* Lindl. in *Hooker Flora Exotica* t. 138. *Bot. Reg.* t. 1213. *Wall. Cat. no.* 1991.

*Ptilocnema bracteatum.* Don *Prodr.* 33.

Hab. in India Orientali, frequens, Wallich; in Zeylona, Macrae. (v. v. cult. et habeo s. sp.)

## 2. *PHOLIDOTA undulata.* Wallich.

*P. pseudo-bulbis ovato-fusiformibus inæqualibus, foliis binis lanceolatis erectis, spicis elongatis pendulis, bracteis ovato-linearibus, sepalis ovatis subcarinatis concavis, labello cucullato ventricoso obsolete trilobo integerrimo.*

*P. undulata.* Wallich in *Bot. Reg. fol.* 1213 in textu.

Hab. in India Orientali, Wallich. (v. ic. pict. in *Bibl. Anglo-Indica.*)

Flores fusci. Labellum tantum pallidè lateritium.

This species is nearly allied to *P. imbricata*, from which its brown flowers, small bractes and differently shaped lip and leaves abundantly distinguish it.

## 3. *PHOLIDOTA rubra.*

*P. pseudo-bulbis ovatis corrugatis, foliis binis lanceolatis, spicis laxis erectis foliis brevioribus: fructiferis longioribus nutantibus, bracteis lanceolatis, sepalis concavis ovatis acutis, labello trilobo: lobo medio ovato acuto.*

Hab. in India Orientali; Wallich. (v. ic. pict. in *Bibl. Anglo-Indica.*)

Sepala et petala lateritia. Labellum et columna lutæ.

I for some time took this for Blume's *Crinonia carnea*; but his description is so brief and in the few particulars he mentions it differs so much as to justify me in regarding it as a distinct species.

## 4. *PHOLIDOTA carnea.*

*P. "bulbis subremotis ovato-oblongis 1-3-phyllis, foliis lineari-lanceolatis, labelli limbo rotundato intus bicalloso."* Blume.

*Crinonia carnea.* Blume p. 339. t. 41.

Hab. in sylvis umbrosis montium Salak et Gede, Javæ, florens toto anno; Blume.

*Variat* bulbis approximatis ovalibus, prope Tjitjalobak, ad montem Salak, Javæ; Blume.

## 5. *PHOLIDOTA globosa.*

*P. "bulbis approximatis globosis 2-3-phyllis, foliis lineari-lanceolatis, labelli limbo obtuso."* Blume.

*Crinonia globosa.* Blume p. 339.

Hab. ad cataractas fluvii Tjapus in montibus Salak, Javæ, florens Octobri; Blume.

## 6. *PHOLIDOTA recurva.*

*P. rhizomate carnosio articulato ascendente, foliis solitariis oblongo-lanceolatis subplicatis, spicis secundis recurvis foliis longioribus, bracteis*

cuneatis membranaceis imbricatis, sepalis lateralibus ovatis dorso acutis, labello ventricoso (undulato ?) indiviso emarginato.

Hab. in *Napalia*, *Wallich*. (*hab. s. sp. comm. cel. Lambert.*)

Articuli rhizomatis  $1\frac{1}{2}$  unciam longi. Folia circiter 3-uncialia. Columna teres anticè tumida. Dorsum clinandrii erectum, rostellum ovatum porrectum.

I know this very remarkable species by specimens given me several years since by Mr. Lambert. It came to England with some of Dr. Wallich's earliest Nipal collections. Its imbricated unilateral recurved spikes characterize it well, and distinguish it from *P. articulata* which besides has the joints of the rhizoma twice as long, and the bractæ of a different figure.

7. *PHOLIDOTA articulata*. *Lindl. in Wall. Cat. no. 1992.*

*P. rhizomate carnosio articulato ascendente, foliis binis pluribusve ovalibus plicatis apice subintegris, spicis laxis cernuis foliorum longitudine, bracteis oblongis concavis, sepalis ovatis, labello cucullato integro apice rotundato plano.*

Hab. in *Pundua, Indiæ Orientalis, Wallich*. (*habeo s. sp. e Museo Anglo-Indico et v. ic. pict.*)

Articuli rhizomatis 3-4 uncias longi. Rachis valdè flexuosa. Flores albi, basi apicis labelli luteâ.

#### XXIV. DILOCHIA.

Sepala conniventia, libera, petalis subæqualia, colorata. Labellum cucullatum, trilobum, basi subsaccatum, trilamellatum. Columna cum labello non articulata, clavata, alata, apice cucullata dentata. Anthera 4-ocularis, ovata, cristata. Pollinia 4.—Herba caulescens, foliis coriaceis acutis distichis subcostatis. Racemus terminalis e squamis coriaceis erumpens, bracteis coriaceis, persistentibus, divaricatis, coriaceis, distantibus. Flores speciosi, sepalis crassioribus quam petala, ovario non torto.

Obs. Octomeriæ structurâ similis, habitu diversissima.

1. *DILOCHIA Wallichii*. *Lindl. in Wall. Cat. no. 1952.*

Hab. in *Singapore, Wallich*. (*hab. s. sp. e Museo Anglo-Indico.*)

#### XXV. CŒLOGYNE.

*Cœlogyne*. *Lindl. Coll. Bot. 33. in textu.*—*Plejone*. *Don. Prodr. nep. 37.*—*Chelonantheræ*, *Sect. 2 et 3.* *Blume Bijdr. 382.*

Sepala conniventia v. patentia, libera, æqualia, petaloidea. Petala nunc sepalis conformia, nunc linearia. Labellum cucullatum, sæpius trilobum, lineis disci elevatis v. cristatis, nunc integerrimum ecristatum (in *Paniscâ*). Columna erecta libera margine alata, apice dilatata, nunc cucullata, stigmate bilabiato. Anthera bilocularis, septo medio non partibili; infra apicem columnæ inserta. Pollinia 4, libera, (♂♂) incumbentia; nunc basi materie granulosa cohærentia.—Herbæ supra arbores et saxa vigentes, foliorum basibus in pseudo-bulbos dilatatis, rhizomate nunc crasso squamoso, nunc obsoleto. Folia coriacea sæpius venis distinctis

æqualibus, nunc quibusdam crassioribus costata v. plicata. Racemi terminales v. radicales e squamis (bracteis sterilibus) corneis erumpentes. Flores speciosi sæpe odorati.

Obs. This genus is nearly related to *Cymbidium* among Vandææ and to *Cattleya* among Epidendrææ, from both which its peculiar habit is alone sufficient to distinguish it. From *Dendrochilum* it is only known by the absence of horn-like processes from its column; for the lip of some of the *Gomphostylis* section is entire, and *C. (Panisca) parviflora* is a *Dendrochilum* in every thing except the want of these processes. There is a strong tendency to produce a gland in some species such as *C. præcox*, *uniflora*, and *fimbriata*; but this is a mere granular mass such as the filum of *Epidendrææ* and will not be confounded with the cartilaginous gland of Vandææ.

1. *CÆLOGYNE flaccida*. Lindl. in Wall. Cat. no. 1961.

*C. pseudo-bulbis oblongis angulatis squamis coriaceis acuminatis ustulatis vestitis, foliis lanceolatis v. oblongo-lanceolatis longè petiolatis, racemo flexuoso nutante, bracteis deciduis, petalis lineari-lanceolatis, labello ovato trilobo: lineis tribus elevatis flexuosis: lobo medio ovato basi auriculato, columnâ integerrimâ.*

Hab. ad Noakote, *Napaliæ*, supra arbores crescens, Wallich. (hab. s. sp. e Museo Anglo-Indico, et v. ic. pict.)

Flores mediocres, albi. Labellum intus flavum, immaculatum.

Vaginis ustulatis conspicua.

2. *CÆLOGYNE cristata*. Lindley.

*C. pseudo-bulbis oblongis demùm angulatis rhizomati crasso squamoso insidentibus, foliis lineari-lanceolatis, racemo radicali nutante flexuoso basi squamis corneis vaginato, bracteis oblongis divaricatis persistentibus, petalis oblongo-lanceolatis, labelli trilobi cristâ duplici interruptâ: inferiore pectinatâ, lobo medio rotundato apiculato, columnâ denticulatâ.*

? *Cymbidium strictum*. Don Prodr.

*Cælogyne cristata*. Lindl. Coll. Bot. p. 33. Wall. Cat. no. 1958.

Hab. in montibus *Napalensibus* supra saxa et arbores, Wallich. (hab. s. sp. e Museo Anglo-Indico et v. ic. pict.)

Flores maximi generis, albi, odorati, divaricati. Sepala et petala conformia, lanceolata, leviter undulata. Labellum leviter cum basi columnæ connatum, cristis duabus parallelis luteis interruptis anticè subintegræ, posticè pectinatis, et ex Wallichio, in seriebus 5 pilorum longorum simplicium s. bifidorum basi desinentibus.

3. *CÆLOGYNE speciosa*.

*C. "bulbis oblongis tetragonis monophyllis, foliis oblongo-lanceolatis nervosis, scapo nutante retroflexo paucifloro, labello intus cristis 2 muricatis."* Blume.

*Chelonanthera speciosa*. Blume p. 384. tab. 51.

*Angræcum nervosum*. Rumph. Herb. Amb. tom. 6. t. 48.

Hab. in sylvis montis Salak, *Javæ*, supra arbores, florens Octobri-Junio, Blume.

"Flores majusculi; sepala exteriora oblonga, acuta, carinata, margine reflexa, albo lutescentia. Labellum infra albo griseum, intus fulvum, lobo medio emarginato undulato."

4. *CÆLOGYNE* *incrassata*.

- C. "bulbis oblongis subtetragonis, foliis lanceolatis nervosis, pedunculo nutante multifloro, labello intus bicristato nudo, limbi lobo medio ovato incrassato." *Blume*.

*Chelonanthera incrassata*. *Blume* p. 384.

Hab. in sylvis montis Pantjar, *Javæ*, florens Junio-Julio. *Blume*.

"Flores sordidè albi, diaphani; labelli limbo fusco undulato."

5. *CÆLOGYNE* *elata*. *Lindl. in Wall. Cat. no. 1959*.

- C. pseudo-bulbis oblongis angulatis in rhizomate crasso squamoso insidentibus, foliis oblongis in basi attenuatis longè petiolatis, scapo terminali stricto foliis brevioribus subracemoso squamis distichis vaginato, bracteis deciduis, petalis linearibus lanceolatis, labelli trilobi medio bicristati lobo medio ovato crenulato, columnâ integrâ.

Hab. in sylvis *Napaliæ* et *Syllet*, *Wallich*, Februario Martio vigens. (*hab. s. sp. e Museo Anglo-Indico, et v. ic. pict.*)

Species sesquipedalis et ultrâ. Flores albi, inodori. Labellum lobis lateralibus rotundatis, intermedio basi ocellis duobus flavis. Capsula lucida trigona clavata sesquipollicaris. *Wallich Mss.*

6. *CÆLOGYNE* *prolifera*. *Lindl. l. c. no. 1956*.

- C. pseudo-bulbis ovatis angulatis rhizomati crasso squamoso insidentibus, foliis lanceolatis longè petiolatis, scapo terminali gracili erecto foliis duplè longiore prolifero sub quoque racemo squamis distichis vaginato, bracteis deciduis, petalis linearibus, labelli trilobi lobo medio refuso integerrimo undulato, columnâ subdenticulatâ.

Hab. ad Noakote et Toka, *Napaliæ*, supra arbores et rupes, florens Maio, *Wallich*. (*hab. s. sp. e Museo Anglo-Indico floribus delapsis.*)

Character floris ex *Wallichii Mss.* Flores ex viridi flavi. Sepala ovata leviter patula, semi-ungicularia, acutiuscula.

7. *CÆLOGYNE* *nitida*. *Lindley l. c. no. 1954*.

- C. pseudo-bulbis ovatis cæspitosis subcostatis squamis nitidis vestitis, foliis lanceolatis acuminatis racemis nutantibus æqualibus, bracteis deciduis, sepalis petalisque oblongis obtusis, labelli lobo intermedio subrotundo cordato-ovato, disco lineis duabus elevatis, columna integra.

*Cymbidium nitidum*. *Roxb. Hort. Beng.*

*Cælogyne*? *nitida*. *Lindl. coll. p. 33.*

Hab. in *Napalia*, *Wallich*. (*hab. s. sp. e Museo Anglo-Indico et v. ic. pict.*)

Flores candidi, odorati. Labellum maculis duabus oblongis venisque croceis in cucullo, et ocellis duobus aurantiacis ad basin lobi intermedii, picâ parvâ ad basin labelli inter duas lineas elevatas.

8. *CÆLOGYNE* *ocellata*. *Lindl. l. c. no. 1953*.

- C. pseudo-bulbis ovatis cæspitosis subangulatis squamis nitidis vestitis, foliis lanceolatis acuminatis in petiolo angustatis racemis strictis æqualibus, bracteis deciduis, sepalis petalisque oblongo-lanceolatis, labelli lobo intermedio ovato ad basin utrinque lamellâ abbreviatâ interruptâ, disco lineis tribus lamellatis, columnâ obsoletè trilobâ.

*Cælogyne punctulata*. *Lindl. coll. p. 33.*

Hab. in Sylhet et Sermore *Indiæ Orientalis*, Wallich. (*hab. s. sp. e Museo Anglo-Indico.*)

Priori affinis habitu et colore florum, differt sepalis petalis labelloque longioribus, racemo erecto, et lamellis labelli.

Obs. C. punctulata mihi olim, ex exemplare solitario descripta, hujus loci est. Nomen mutavi quia dubius hæreo an flores reverà sint punctati.

9. CÆLOGYNE Gardneriana. Lindl. in Wall. Pl. As. Rar. vol. 1. p. 33. t. 38.

C. pseudo-bulbis ampullaceis teretibus, foliis lanceolatis 5-costatis acuminatis longè petiolatis, racemis nutantibus densifloris terminalibus radicalibusque foliis multò brevioribus, bracteis deciduis, sepalis petalisque oblongis, labelli denticulati basi saccati lobo medio bilobo lateralibus minore.

Hab. in *India Orientali*, Wallich. (*v. ic. pict. l. c.*)

Maxima generis. Pseudo-bulbi 6 uncias longi; folia sesquipedalia; racemi spithamæi. Flores candidi immaculati. Bracteæ oblongæ.

10. CÆLOGYNE fuscescens. Lindl. in Wall. Cat. no. 1962.

C. pseudo-bulbis oblongis teretibus, foliis oblongis plicatis coriaceis utrinque acutis, racemo nutante multifloro, bracteis deciduis, petalis linearibus, labello trilobo trilineato: lobo medio amplo ovato acuto undulato, columnâ integrâ.

Hab. in *Napalia* supra arbores, Wallich. (*hab. s. sp. e Museo Anglo-Indico, et v. ic. pict.*)

Flores ampli e viridi fuscесcentes. Sepalum supremum lateralibus majus. Labellum disco loborum lateralium et maculis duabus rotundis ad basin lobi medii cinnamomeis.

11. CÆLOGYNE trinervis. Lindl. l. c. no. 1955.

C. pseudo-bulbis ovatis in rhizomate crasso squamoso insidentibus, foliis lanceolatis plicatis in petiolum longum acuminatis, racemo brevi stricto, bracteis deciduis, petalis linearibus patentibus, labelli trilobi lobis rotundatis: intermedio undulato lineis tribus flexuosis elevatis, columnâ integrâ.

Hab. in Tavoy oræ Tenasserim, *Indiæ Orientalis*, Wallich. (*hab. s. sp. e Museo Anglo-Indico.*)

Species elegantissima C. fuscесcenti affinis.

12. CÆLOGYNE odoratissima. Lindl. l. c. no. 1960.

C. pseudo-bulbis cæspitosis ovatis, foliis lanceolatis petiolatis racemi bistriflori longitudine, bracteis cymbiformibus divaricatis, petalis lineari-lanceolatis, labello trilobo tricristato: lobo medio undulato rotundato, columnâ integerrimâ.

Hab. in monte altissimo *Zeylonæ*, Nuera Ellia dicto, supra arbores, *Macrae*. (*hab. s. sp. et v. ic. pict.*)

Planta parva, 4 circiter uncias alta, rhizomate vix ullo. Pseudo-bulborum vaginæ virides concolores. Flores candidi, fragrantissimi, unicolores, maculis nullis. Petala magis reflexa quam sepala et multò angustiora.

13. CÆLOGYNE fimbriata. Lindl.

C. pseudo-bulbis oblongis in rhizomate squamoso insidentibus, foliis lan-  
May, 1830.

ceolatis pedunculo terminali vaginato bifloro duplò longioribus, petalis linearibus reflexis, labelli trilobi lobo medio undulato fimbriato, columna apice dentatà.

*Cœlogyne fimbriata.* Lindl. in *B. Reg.* t. 868. *Wall. Cat.* no. 1957.

*Broughtonia linearis.* Wall. in *Bibl. Angl. Ind.* ic. pict. n. 649.

Hab. in China; etiam in *Napalia*, Wallich. (hab. s. sp. e *Museo Anglo-Indico*, v. v. cult. et iconem pict.)

Herba rhizomate annulato latè repente. Flores luteo-virides. Labellum carneum, basi saccatum, limbo fusco-aurantiaco medio bicristato, cristà utrinque minore abruptà. Pollinia basi materie granulosa cohærentia. Bracteæ in indica magnæ persistentes, in hortensi deciduæ.

14. *CÆLOGYNE uniflora.* Lindl. l. c. no. 1966.

C. pseudo-bulbis ampullaceis aggregatis rhizomate insidentibus, foliis lineari-lanceolatis acuminatis, scapis radicalibus unifloris pseudo-bulbis subæqualibus, petalis lanceolatis, labello oblongo: lobis lateralibus brevibus falcatis.

Hab. in *India Orientali*, Wallich. (v. iconem pict. in *Museo Anglo-Indico*.)

Planta spithamæa. Flores dilutè carnei, sepalis lateralibus carinatis, petalis lanceolatis conformibus. Labellum sepalis ferè duplò latius, medio maculis tribus aurantiacis parùm elevatis notatum, de quibus lineæ 4, duæ ex media inferiore, parumper elevatæ decurrunt. *Wallich Mss.*

In this species it appears from Dr. Wallich's figure that there is a production at the base of the pollen masses, indicating I presume from its colour a formation of granular matter as in some other species that I have examined. It is nevertheless possible that the artist may have intended to represent a cartilaginous gland, in which case the species would be rather referable to *Cymbidium*. I have seen no specimen.

15. *CÆLOGYNE longifolia.*

C. "bulbis oblongis tetragonis diphyllis, foliis longo-lanceolatis, racemo elongato flexuoso multifloro, labello intus bicristato: limbo rotundato emarginato patulo." *Blume.*

*Chelonanthera longifolia.* *Blume p.* 385. tab. 51.

Hab. circa originem fluminis Tjiburru in monte Gede, *Javæ*, supra arbores; ad montem Salak in sylvis altioribus propè Passir *Java*, florens Aprili-Junio, *Blume.*

"Flores majusculi, helvoli. Sepala externa oblonga, carinata. Labellum basi concavum."

16. *CÆLOGYNE miniata.*

C. "bulbis oblongis subtetragonis diphyllis, foliis lineari-lanceolatis, racemo erecto paucifloro, labello intus lineis 2 elevatis: limbo erecto acutiusculo." *Blume.*

*Chelonanthera miniata.* *Blume p.* 385.

Hab. propè cataractas fluvii Tjikundul, ad montem Gede, *Javæ*, et in altis montis Salak supra arbores, florens Junio, etc. *Blume.*

"Flores miniati; sepala acuta, exteriora leviter carinata."

## § GOMPHOSTYLIS. Wall. Mss. Pleione. Don Prodr. nep.

*Folia serotina. Pseudo-bulbi vaginis reticulatis tecti, depressi, cute tenera nec corned lucida. Flores solitarii radicales pedunculo vaginato. Labellum fimbriatum basi saccatum. Columna apice petaloidea cucullata. Pollinia materie granulosa coherentia.*

I am unable to distinguish any thing like an essential difference between the plants of this section and *Cœlogyne* proper; their habit is remarkable but there is a close approach to it in *C. uniflora*. The granular matter by which their pollen masses cohere is of exactly the same nature as that of *C. fimbriata*.

17. *CÆLOGYNE humilis*. Lindley.

*C. foliis . . . . ., labello integro emarginato fimbriato, disco cristis plurimis fimbriatis, columnâ apice subintegrâ.*

*Epidendrum humile. Smith Exot. Bot. t. 98.*

*Cymbidium humile. Smith in Rees.*

*Pleione humilis. Don. Prodr. 37.*

*Cœlogyne humilis. Lindl. coll. p. 37. Wall. Cat. no. 1963.*

*Hab. in Nepalia, Wallich. (hab. s. sp. e Museo Anglo-Indico, et v. ic. pict.)*

*Flores candidi. Labellum sanguineo maculatum. Vaginæ virides immaculatæ. Columna sanguineo punctata.*

18. *CÆLOGYNE Wallichiana*.

*C. foliis . . . . ., labelli lobo medio ovato denticulato apice bilobo integro cum apiculo: lateralibus obsolete, disco cristis quinque incompletis denticulatis, basi breviter calcarato, columnâ apice dentatâ, stigmatibus labio inferiore tricuspidato.*

*Hab. in Pundya, Wallich. (v. ic. pict. in Museo Anglo-Indico.)*

*Flores purpurei, prioris.*

19. *CÆLOGYNE maculata*.

*C. foliis lanceolatis plicatis, labelli lobis lateralibus abbreviatis integris: intermedio ovato retuso undulato, disco lineis quinque rectis denticulatis, columnâ integrâ, bractea ventricosa.*

*Gomphostylis candida. Wallich in ic. pict. in Museo Anglo-Indico n. 651.*

*Hab. in Pundua, Indiæ Orientalis, Wallich. (v. ic. pict. in l. c.)*

*Flores candidi. Labellum medio sanguineo-lineatum, ad latera lobi intermedii guttatum. Pseudo-bulbi fusci.*

20. *CÆLOGYNE præcox*. Lindley.

*C. foliis oblongis ovatisque plicatis, labelli lobo medio oblongo emarginato fimbriato: disco cristis quinque serratis, basi breviter calcarato, columnâ apice dentatâ.*

*Epidendrum præcox. Smith Exot. Fl. t. 97.*

*Cymbidium præcox. Smith in Rees.*

*Pleione præcox. Don Prodr. 37.*

*Cœlogyne præcox. Lindl. Coll. Bot. p. 37. Wall. Cat. no. 1965.*

*Hab. in Nepalia, Wallich. (hab. s. sp. e Museo Anglo-Indico, et v. ic. pict.)*

*Flores purpurei, labelli limbo albo. Pseudo-bulbi maculati. Vaginæ inferiores pedunculorum maculatæ.*



## § PANISEA.

*Sepala petala et labellum æqualia conniventia conformia: hoc integerrimo erectato. Columna alato-marginata ecornis. Inflorescentia radicalis. Cælogyni et Dendrochilo pariter affinis, huic labello illo columnâ, ab utroque diversa. An genus proprium?*

## 21. CÆLOGYNE parviflora.

C. pseudo-bulbis cæspitosis ovatis elongatis, foliis lineari-lanceolatis obtusis racemi stricti imbricati longitudine, bracteis ovatis acutis pedicellis brevioribus, floribus imbricatis, petalis sepalisque lineari-oblongis æqualibus conniventibus, labello petalis conformi basi sigmoideo flexuoso integerrimo, columnâ cuneatâ integrâ.

? *Dendrobium demissum.* Don Prodr.

Hab. in *Napalia*, Wallich. (hab. s. sp. e Museo Anglo-Indico.)

Petala basi cordata. Scapus radicalis, capillaris, 4-5-uncias longus.

This plant occupies an intermediate position between *Cælogyne* and *Dendrochilum*, agreeing with the former in its winged column, differing in its entire lip, and connivent flowers, and agreeing with the latter in its entire lip with a sigmoidal flexure at the base, but differing in the structure of the column and especially in the want of the lateral horn-like processes.

## XXVI. DICRYPTA.

*Sepala libera, erecta, æqualia. Petala conformia paulò minora. Labellum oblongum, obsolete trilobum, carnosum, cum columna articulatum, lineâ elevatâ interruptâ disci. Columna cum ovario continua, semiteres, ad basin anticè clavata. Clinandrium convexum. Anthera obsolete bilocularis. Pollinia 4, complanata, incumbentia (♂ ♂): posticis minoribus, materie granulosa leviter coherentia.*

Habitus et patria ignoti.

1: DICRYPTA Baueri.

Habitat . . . . . (v. ic. *Bauerianam*.)

Pedicellus medio articulatus, bractea oblongâ glabrâ vaginatus. Ovarium pedicello paulò longius, cylindraceum, angulis placentariis costalibusque subæqualibus. Flos luteus sepalis extus punctatis. Clinandrium convexum emarginatum, cavitate levi pro anthera recipienda. Anthera papillosa. Capsulæ valvulæ subæquales.

I only know this curious plant from a sketch of the flowers made by Mr. Bauer from a plant that blossomed at Kew, September 3, 1806. It is not noticed in the 5th volume of the *Hortus Kewensis* published in 1813.

## XXVII. MESOCLASTES.

*Sepala conniventia v. (anthesi peractâ?) reflexa, æqualia, libera: laterali-bus carinatis. Petala sepalis subæqualia. Labellum integrum, concavum, cum columnâ parallelum, subcochleatum, medio interruptum, dimidiâ superiore ovatâ subcordatâ; venis simplicibus a basi labelli radiantibus. Columna cum ovario continua, non cum labello articulata,*

nana, aptera. Anthera subrotunda, inappendiculata, bilocularis. Pollinia 2, libera, medio foveata. Ovarium triquetrum.—Herbæ caulescentes, foliis teretibus, floribus solitariis v. paucis.

1. *MESOCLASTES* uniflora. *Lindl. in Wall. Cat. no. 1993.*

*M. floribus solitariis, labelli dimidiâ superiore medio callosâ,*

*Hab. in Gossain Than, Wallich. (hab. s. sp. ex Herb. Anglo-Indico.)*

Labellum dimidiæ inferioris venis incrassatis. Sepala conniventia. Folia paulò majora quam in sequente. Capsula lineari-oblonga sesquiuncialis.

2. *MESOCLASTES* brachystachys. *Lindl. l. c. no. 1994.*

*M. spicis brevibus densis paucifloris, labelli dimidiâ superiore ecallosâ.*

*Hab. in Sylhet, Indiæ Orientalis, Wallich. (hab. s. sp. ex Herb. Angl. Ind.)*

Sepala demum reflexa. Labellum dimidiæ inferioris venis versus basin evanescentibus. Caules duri. Folia filiformia subtortuosa. Hujus tantum vidi pollinia.

## Section II. DENDROBIEÆ.

ORCHIDEE; *Tribus* Malaxidem,\*\* Dendrobicem. *Lindley in Bot. Reg. fol. 1291.*

Columna in ovario recumbens, ad basin longius producta.

### ARTIFICIAL ANALYSIS OF THE GENERA.

#### *Pollinia 2; v. 1 bipartibile.*

Labellum bilobum (cum columna continuum)

Petala unguiculata. Sepala lateralia omninò connata

Petala sessilia. Sepala lateralia basi tantum connata

Labellum integrum, v. trilobum (cum columna articulatum)

Petala multifida: laciniis clavatis appendiciformibus

Petala indivisa

Labellum calcaratum

Labellum ecalcaratum

Folia plana

Folia equitantia

29. *LYRÆA.*

28. *COCHLIA.*

36. *EPICRANTHES.*

35. *MICROCÆLIA.*

39. *DIGLYPHOSA.*

44. *OXYSTOPHYLLUM.*

#### *Pollinia 4. (nunc in unum connata.)*

Petala nulla

Petala duo.

Sepalum posticum majus, lateralibus altè connatum

Sepalum posticum liberum

Labellum cum columna connatum

Labelli limbus longè unguiculatus

Labelli limbus sessilis dilatatus

Labellum liberum, v. tantum cum basi producta columnæ connatum

Labellum unguiculatum, planum; ( sæpiùs integerrimum et carnosum)

Sepala lateralia acuminatissima supremo nano

Sepala lateralia supremo subæqualia

Petala et labellum minima conformia

Labellum petalis majus difforme

Sepala reflexa

Sepala erecta

37. *MONOMERIA.*

30. *MEGACLINIUM.*

38. *STENOGLOSSUM.*

46. *METACHILUM.*

32. *CIRRHOPE TALUM.*

33. *TRIAS.*

34. *MACROSTOMIUM.*

31. *BOLBOPHYLLUM.*

Labellum sessile cucullatum; (sepiis trilobum et membranaceum)

Folia plana

Labellum posticum. Flores carnesi. Alabastra trigona	}	45. POLYSTACHYA.
Labellum anticum (sepiis). Flores membranacei. Alabastra teretia		
Folia equitantia	-	43. APORUM.

Pollinia 8.

Clinandrium cucullatum, margine erecto membranaceo. Anthera immersa

Clinandrium non cucullatum.	}	41. PHREATIA.
Sepala lateralia basi equalia		
Sepala lateralia basi valdè obliqua	-	40. MYCARANTHES.
	-	42. ERIA.

## XXVIII. COCHLIA.

Cochlia. *Blume Bijdr.* 320. tabellen 59.

Sepala erecta: lateralibus basi connatis. Petala minora. Labellum basi angustatum, ungui columnæ junctum, adscendens, supernè in limbum semilunatum margine revolutum et verrucosum dilatatum. Columna bicornis, recumbens. Anthera semibilocularis, columnam posticè terminans. Pollinia 2, ovata, libera.—Herba epiphyta caulescens. Caules vaginis scariosis imbricati. Folia coriacea, ovato-elliptica, suprà convexa, subtùs concava. Pedunculi laterales, solitarii. Flores capitati, violacei. *Character ex Blume.*

1. COCHLIA violacea. *Blume l. c.*

Hab. ad montem Salak insulæ Javæ, supra arbores, florens Novembri Decembri; Blume.

## XXIX. LYRÆA.

Sepala conniventia inæqualia: lateralibus inter se et cum basi producta columnæ connatis. Petala nana, spatulata. Labellum altè bilobum, cum basi productâ columnæ continuum, (nec articulatum). Columna nana, in ovario recumbens. Pollinia 2, in uno connata.—Herba, habitu Bolbophylli. *Char. ex A. Richard. orch. Maur. p. 62.*

This genus agrees entirely with Bolbophyllum in habit. It is distinguished by its labellum being deeply lobed and continuous, not articulated, with the column; by its spatulate petals, and by the cohesion of the lateral sepals.

1. LYRÆA prismatica.

Bulbophyllum prismaticum. *Thouars orch. Afr. t. 109. A. Rich. orch. Maur. p. 62. t. 8. no. 3.*

Hab. in insulis Mauritiæ (Thouars, Bory), Borboniæ (Bory), supra arbores et saxa; A. R.

Folia gemina e pseudo-tubere subtetragono, coriacea, oblongo-lanceolata, obtusa, obliquè emarginata. Scapus gracilis radicalis, palmaris, versus basin squamatus. Rachis gracilis. Flores futescentes in spicam raram dispositi, ex axilla bractæ semicordatæ amplexicaulis.

## XXX. MEGACLINIUM.

*Megacclinium. Lindl. in Bot. Reg. 989.*

Sepala erecta, inæqualia: lateralibus minoribus cum columna connatis. Petala nana. Labelium nanum integerrimum cum basi columnæ elasticè articulatam. Columna nana marginata disciformis in apicem ovarii prona basi vix producta. Anthera obsolete bilocularis. Pollinia 4, libera, per paria coherentia, æqualia.—Herbæ epiphytæ, rhizomate repente pseudo-bulbifero. Folia coriacea, avenia. Racemi radicales. Rachis dilatata, compressa.

A genus nearly related to *Bolbophyllum* from which however it is abundantly distinct.

1. *MEGACLINIUM falcatum. Lindley.*

*M. foliis binis ovalibus emarginatis biplicatis, rachi compressâ falcatâ crenatâ, sepalo supremo obtuso apice utrinque calloso: lateralibus reflexis bidentatis, petalis minimis subulatis obtusis.*

*Megacclinium falcatum. Lindley in Bot. Reg. t. 989.*

Hab. in *Sierra Leone* (v. v. cult.)

The lip of this plant is elastically articulated with the column, and exhibits a beautiful instance of vegetable irritability, analogous to that of some species of *Pterostylis*. The lip moves up and down with great rapidity, much in the same way as the head of the Chinese images of Mandarins.

2. *MEGACLINIUM maximum.*

Hab. in *S. Leone; Smeathman* (v. s. sp. in *Herb. Banks. sine floribus et foliis.*)

Rachis 5 uncias longa, semunciam lata, complanata, crenata. Scapus pedalis. Rhizoma pennæ cygnæ crassitudine. Pseudo-bulbus oblongus, verosimiliter angulatus.

## XXXI. BOLBOPHYLLUM.

*Bolbophyllum. Thouars orch. Afr. Lindley in Bot. Reg. 832. Orch. scel. no. 143.—Bolbophyllum. Spreng. syst. 3. p. 732.—Diphyes. Blume Bijdr. 310. tabellen 66.—Tribrachia. Lindl. in Bot. Reg. 832.—Anisopetalum. Hooker Fl. Esot. 149.*

Sepala erecta, acuminata, subæqualia, lateralibus cum pede columnæ connatis et basi obliquis. Petala nana (rarissimè sepalis subæqualia). Labelium cum pede columnæ articulatam, unguiculatum, sæpidis integrum, et posticum. Columna nana, anticè bidentata, v. bicornis. Anthera 1-v. 2-locularis. Pollinia 4, libera, valdè inæqualia, nunc in uno connata, nunc per paria coherentia, altero cujusvis paris minuto lobuliformi.—Herbæ epiphytæ, rhizomate repente pseudo-bulbifero. Folia coriacea, avenia. Racemi radicales.

I have no hesitation in referring all the above cited genera hither. When I published *Tribrachia* I was only acquainted with *Bolbophyllum* through Du Petit Thouars's figures; I now know them to be the same. *Diphyes* is obviously a synonym. Dr. Hooker's *Anisopetalum* differs only in the greater inequality of the sepals. Even *Cirrhopetalum* itself is less distinct from *Bolbophyllum* than would appear from the inspection of the 1st and 2nd species.

§ I. *Flores fasciculati v. solitarii, radicales, speciosi.*

1. *BOLBOPHYLLUM leopardinum*. Lindl. in Wall. Cat. no. 1981.

B. pseudo-bulbis cæspitosis ovato-oblongis vestitis, foliis coriaceis rigidis oblongis solitariis petiolatis, floribus radicalibus fasciculatis globoso-campanulatis, sepalis ovatis guttatis subæqualibus, petalis minoribus conformibus, labello carnosio ovato obtuso integerrimo.

*Dendrobium leopardinum*. Wallich Tentamen vol. 1. p. 39. t. 28.

Hab. in India Orientali in monte Chandaghiry super arborum truncos; Wallich. (habeo s. spont. e Museo Anglo-Indico.)

This is the handsomest species of the genus and is remarkable for its large globose pale yellowish green flowers spotted with purple. Dr. Wallich's description in the work above quoted is excellent.

2. *BOLBOPHYLLUM affine*. Lindl. l. c. no. 1982.

B. rhizomate crasso repente, pseudo-bulbis oblongis teretibus, foliis coriaceis rigidis oblongis solitariis petiolatis emarginatis, floribus radicalibus solitariis, sepalis petalisque æqualibus ovato-lanceolatis, labello carnosio ovato-lanceolato obtuso integerrimo.

Hab. in Napalia, Wallich. (habeo s. sp. e Museo Anglo-Indico.)

This species is nearly related to the preceding, with which it agrees in the position and size of its flowers, but it differs from it in their being solitary, in the more lanceolate figure of the floral envelopes, and especially in the petals being as large as the sepals; a solitary case in this genus.

3. *BOLBOPHYLLUM mutabile*.

B. "foliis coriaceis lanceolatis retusis, pedunculis folio brevioribus bifloris." Blume.

*Diphyes mutabilis*. Blume Bijdr. 312.

Hab. in sylvis altioribus montis Salak insulæ Javæ, florens Julio Septembri; Blume.

"Caules ebulbi. Pedunculi breves pauciflori. Gynostemium bicuspidatum. Anthera 1-locularis. Flores virescentes demum crocei; sepala exteriora acuminata; labellum miniatum; limbus obtusus, subcrenulatus." Blume.

4. *BOLBOPHYLLUM ciliatum*.

B. "bulbis remotis, foliis lineari-lanceolatis, pedunculis folio brevioribus." Blume.

*Diphyes ciliata*. Blume Bijdr. 317.

Hab. ad originem fluvii Tjiburrum Javæ, in montosis Gede, florens Junio; Blume.

"Pedunculi solitarii uniflori. Flores violacei, sepalis exterioribus acuminatis, labelli limbo ciliolato." Blume.

5. *BOLBOPHYLLUM cernuum*.

B. "bulbis approximatis, foliis lanceolatis, pedunculis folio longioribus cernuis." Blume.

*Diphyes cernua*. Blume Bijdr. 318.

Hab. in sylvis humidis montis Salak, Javæ, florens Septembri; Blume.

"Pedunculi solitarii uniflori. Flores purpurascens, sepalis exterioribus elongatis, labelli limbo margine reflexo, anthera cristatâ." Blume.

6. *BOLBOPHYLLUM parvulum*.

B. "bulbis approximatis depressis, foliis ovalibus obtusis, pedunculis foliorum valde longioribus, sepalis exterioribus inæqualibus acutis, labelli limbo obtuso glanduloso tumido." *Blume*.

*Diphyes pusilla*. *Blume Bijdr.* 317.

Hab. in sylvis montis Salak, *Javæ*, ad corticem arborum, florens Junio Decembri; *Blume*.

"Pedunculi solitarii uniflori. Flores aurantiaci, sepalo dorsali nervoso." *Blume*.

7. *BOLBOPHYLLUM hirsutum*.

B. "bulbis approximatis, foliis lanceolatis, sepalis exterioribus subæqualibus apice hirsutis, labelli limbo obtuso intus glanduloso." *Blume*.

*Diphyes hirsuta*. *Blume p.* 318.

Hab. prope cataractas calidas montis Gede supra arbores et in altioribus Salak, *Javæ*, florens Maio Augusto; *Blume*.

"Flores aurantiaci, sepalis ovali-oblongis acutis striatis, labello internè lineis 2 elevatis notato."

8. *BOLBOPHYLLUM ovalifolium*.

B. "bulbis approximatis, foliis ovalibus, sepalis exterioribus lanceolatis inæqualibus, labelli limbo obtuso." *Blume*.

*Diphyes ovalifolia*. *Blume p.* 318.

Hab. in montosis Gede, *Javæ*, florens Junio; *Blume*.

"Flores flavo-virentes, sepalis lateralibus dorsali majoribus, labello brunneo."

9. *BOLBOPHYLLUM inæquale*.

B. "bulbis approximatis, foliis lineari-lanceolatis obtusis, sepalis lateralibus postico ferè duplè longioribus acuminatis, labelli limbo verrucoso." *Blume*.

*Diphyes inæqualis*. *Blume p.* 319.

Hab. in sylvis primævis montis Pangoerangoe, *Javæ*, florens Novembri; *Blume*.

"Flores aurantiaci, nervis atropurpureis. Labellum atropurpurascens."

10. *BOLBOPHYLLUM bicolor*.

B. pseudo-bulbis ovalibus, foliis solitariis oblongis coriaceis emarginatis floribus longioribus, corymbo trifloro pedunculato, sepalo supremo oblongo cuspidato: lateralibus lanceolatis longioribus, petalis oblongis cuspidatis, labello ovato obtuso.

Hab. in *China*; *Reeves. (v. ic. pict. Sinens. in Bibl. Hort. Soc.)*

Flores speciosi, crocei. Sepalum supremum et petala apice purpurea purpureo punctata. Labellum croceum puncticulatum.

11. *BOLBOPHYLLUM tenellum*.

B. "bulbis approximatis, foliis lanceolatis obtusis, sepalis inæqualibus: lateralibus ovalibus obtusis dorsali lanceolato majoribus, labelli limbo tumido verrucoso." *Blume*.

*Diphyes tenella*. *Blume p.* 319. *t.* 66.

May, 1830.

Hab. propè Passir Ipis provinciæ Buitenzorg, *Javæ*, florens Julio; Blume.  
 "Flores pallidè aurantiaci; labellum atropurpureum, infernè canaliculatum."

12. *BOLBOPHYLLUM* gracile.

B. "bulbis approximatis, foliis lineari-spatulatis, sepalis exterioribus acuminatis." *Blume*.

*Diphyes gracilis*. *Blume* p. 319.

Hab. in sylvis humidis montis ignivomi Gede, *Javæ*, florens Junio; Blume.  
 "Flores pallidè aurantiaci, limbo labelli obtuso, glanduloso."

13. *BOLBOPHYLLUM* mucronatum.

B. "bulbis remotis, foliis ovalibus planis mucronulatis, labello carinato." *Blume*.

*Diphyes mucronata*. *Blume* p. 317.

Hab. in montanis Pantjar, *Javæ*, florens Junio Julio; Blume.

"Pedunculi confertè multiflori. Flores pallidè flavescentes, sepala exteriora acuminata, subæqualia, internè spatulata, acuta. Gynostemium integrum."

14. *BOLBOPHYLLUM* tenuifolium.

B. "bulbis remotis, foliis ovalibus margine recurvis, labello internè carinato." *Blume*.

*Diphyes tenuifolia*. *Blume* p. 316.

Hab. in sylvis montis Salak, *Javæ*, florens Octobri; Blume.

"Pedunculi confertè multiflori. Flores pallidè flavi, sepala exterioribus subæqualibus, dorsali nervis atropurpureis, interioribus minutissimis, obtusis, margine punctis purpureis variegatis. Labellum eglandulosum. Anthera dorso cristata." *Blume*.

15. *BOLBOPHYLLUM* violaceum.

B. "bulbis remotis, foliis lanceolatis obtusis, sepalis interioribus obliquè emarginatis." *Blume*.

*Diphyes violacea*. *Blume* p. 316.

Hab. in sylvis Salak, *Javæ*, florens Septembri; Blume.

"Pedunculi confertè multiflori. Flores violacei, sepalis exterioribus acuminatis. Labellum obtusum, limbo flavo. Anthera dorso glandulosa."

16. *BOLBOPHYLLUM* tortuosum.

B. "foliis lineari-lanceolatis, labello utrinque hirsuto, gynostemii appendicibus tortuosis." *Blume*.

*Diphyes tortuosa*. *Blume* p. 311.

Hab. in arboribus ad montem Salak, *Javæ*, florens Octobri; Blume.

"Sepala exteriora nervis 3 atropurpureis. Labellum carnosum, atropurpureum, limbo luteo. Caules ebulbi."

§ H. Flores spicati v. racemosi; rachis filiformi.

17. *BOLBOPHYLLUM* auricomum. *Lindl. in Wall. Cat. no. 1985.*

B. pseudo-bulbis ovatis teretibus, foliis . . . . .; scapis elongatis erectis,

spicâ cernuâ multiflorâ, sepalis ovatis acuminatis æqualibus glaberrimis, petalis obtusis ciliatis, labello minimo ovato obtuso carnosio integerrimo.

Hab. in Tavoy, *Indiæ Orientalis*, Wallich. (habeo s. sp. e Museo Anglo-Indico.)

Pollinia 4, per paria cohærentia, interioribus minimis lobuliformibus.

18. *BOLBOPHYLLUM hirtum*. Lindl. l. c. no. 1989.

B. pseudo-bulbis cæspitosis ovatis teretibus, foliis . . . . .; scapis erectis pubescentibus, spicis recurvis villosis multifloris, sepalis acuminatis subæqualibus, petalis minutis ovatis, labello lineari integerrimo retuso.

*Stelis hirta*. Smith! in Rees.

*Tribrachia hirta*. Lindley Coll. 41.

Hab. in *Napalia*, Wallich. (hab. s. sp. e Museo Anglo-Indico, et v. ic. pict.)

Omnes partes floris valdè hirtæ. Flores virescentes. Scapi 4-unciales; spicæ æquilongæ. Pollinia 4, per paria cohærentia; interioribus minimis excavatione majorum jacentibus.

19. *BOLBOPHYLLUM Careyana*. Spreng.

B. rhizomate repente, pseudo-bulbis ovatis angulatis, foliis lineari-loratis erectis solitariis, spicis cylindraceis densifloris erectis pseudo-bulbis longioribus, sepalis lateralibus maximis, petalis triangularibus apice subulatis, labello trilobo plano: lobis lateralibus abbreviatis.

*Pleurothallis purpurea*. Don Prodr. 33.

*Tribrachia purpurea*. Lindl. Coll.

*Anisopetalum Careyana*. Hooker l. c. t. 149.

*Bolbophyllum Careyana*. Spreng. syst. 3. 732. Wall. Cat. no. 1990.

Hab. in *Napalia* et *Martaban*, Wallich. (hab. s. sp. e Museo Angl. Ind.)

Flores in icone Hookerianâ sepalis sordidè luteis purpureo maculatis, petalis flavis, labello plumbeo violaceo, columnâ croceâ; in Wallichiano fusco-purpurei sine ullo alio colore. Pollinia 4, per paria cohærentia, interioribus minimis nec æqualibus ut vult cel. Hooker.

20. *BOLBOPHYLLUM reptans*. Lindl. l. c. no. 1988.

B. rhizomate repente, pseudo-bulbis ovatis teretibus, foliis solitariis linearibus apice obsolete bidentatis, scapo erecto foliis brevioribus, racemo laxo, bracteis membranaceis ovario longioribus, sepalis lanceolatis subæqualibus: lateralibus basi obliquis, petalis minutis oblongis obtusis, labello ovato integerrimo, columnâ bicorni.

*Tribrachia reptans*. Lindley Coll. 41. t. A.

Hab. in *Napalia*, Wallich. (hab. s. sp. e Museo Anglo-Indico et v. ic. pict.)

Sepala pallidè crocea; petala alba; labellum disco purpurascens. Pseudo-bulbi juniores ramentis vestiti; adulti nudi.

21. *BOLBOPHYLLUM variegatum*. Thouars.

B. rhizomate repente, pseudo-bulbis ovato-subrotundis teretibus, foliis binis lineari-loratis acutis, scapis erectis foliis brevioribus, spicis nutantibus, sepalis acuminatis, petalis ovatis, labello canaliculato integerrimo obtuso, bracteis maximis.

*Bulbophyllum variegatum*. Thouars orch. Afr. t. 105. 106. A. Rich. orch. Maur. p. 64.

*Bulbophyllum nutans*. A. Rich. orch. Afr. p. 63. t. 8. no. 2.

Hab. in insula *Borboniæ*; Thouars.



22. *BOLBOPHYLLUM nutans.* *Thouars.*

B. rhizomate repente filiformi, pseudo-bulbis subrotundis subquadratis, foliis binis oblongis retusis, scapis foliis longioribus subnutantibus, sepalis ovatis acutis, petalis minoribus conformibus, labello ovato canaliculato subcordato.

*Bulbophyllum nutans.* *Thouars t. 107. Ach. Rich. orch. Maur. p. 63.*

Hab. in insulis *Mauritii* et *Borboniæ*, Commerson, Thouars.

23. *BOLBOPHYLLUM pendulum.* *Thouars.*

B. rhizomate filiformi, pseudo-bulbis subrotundis subquadratis, foliis binis lineari-oblongis emarginatis, scapis foliis brevioribus recurvis, sepalis oblongis acutis: lateralibus collateralibus majoribus, petalis ovatis, labello carnoso cordato-ovato obtuso.

*Bulbophyllum pendulum.* *Thouars t. 104. A. Rich. p. 65.*

Hab. in *Mauritio*; Thouars.

24. *BOLBOPHYLLUM densum.* *Thouars.*

B. rhizomate repente, pseudo-bulbis ovalibus, foliis binis lineari-loratis obliquè emarginatis scapis brevioribus, spicis erectis, sepalis ovatis inferioribus majoribus, labello ovato-cordato integerrimo.

*Bulbophyllum densum.* *Thouars t. 108. A. Rich. p. 64.*

Hab. in *Mauritio*, Thouars.

25. *BOLBOPHYLLUM incurvum.* *Thouars.*

B. pseudo-bulbis subquadratis, foliis solitariis ovali-oblongis obliquè emarginatis, scapis erectis foliis longioribus, spicis nutantibus, sepalis acuminatis, petalis linearibus, labello oblongo ciliato, columnâ bicorni.

*Bulbophyllum incurvum.* *Thouars t. 95. A. Rich. orch. Maur. p. 64.*

Hab. in *Mauritio*; Thouars.

26. *BOLBOPHYLLUM gracile.* *Thouars.*

B. pseudo-bulbis ovalibus compressis, foliis geminis lineari-loratis emarginatis scapo erecto gracili brevioribus, vaginis scapi inflatis, spicâ filiformi multiflorâ.

*Bulbophyllum gracile.* *Thouars t. 101.*

Hab. in *Mauritio*; Thouars.

Flores minimi, vix noti; verosimiliter tamen hujus generis.

27. *BOLBOPHYLLUM minutum.* *Thouars.*

B. rhizomate filiformi, pseudobulbis subrotundis foliis binis oblongis emarginatis subæqualibus, scapo erecto elongato, spicâ pauciflorâ, sepalis ovatis petalisque acutis, labello oblongo convexo integerrimo.

*Bulbophyllum minutum.* *Thouars t. 110.*

Hab. in *Madagascar*; Thouars.

28. *BOLBOPHYLLUM Commersonii.* *Thouars.*

B. rhizomate repente, pseudo-bulbis oblongis subangulatis, foliis solitariis oblongis obliquè emarginatis, scapo erecto multifloro foliis longiore, floribus . . . . .

*Bulbophyllum Commersonii.* *Thouars t. 97.*

Hab. in *Borbonia*; Thouars.

29. *BOLBOPHYLLUM erectum*. *Thouars*.

B. rhizomate filiformi; pseudo-bulbis subrotundis angulatis, foliis oblongis solitariis emarginatis, scapo erecto foliis longiore, spicâ laxâ nutante, sepalis lateralibus acuminatis: supremo acuto, petalis subulatis, labello oblongo ciliato, columnâ muticâ.

*Bulbophyllum erectum*. *Thouars* t. 96.

Hab. in *Madagascar*; *Thouars*.

30. *BOLBOPHYLLUM recurvum*.

B. pseudo-bulbis ovatis compressis cæspitosis, foliis solitariis oblongis oblique emarginatis subtus purpureo-maculatis, scapis pendulis foliis duplò longioribus, spicis quadrifariam imbricatis, sepalis ovatis acutis ciliatis, petalis obovatis, labello ovato integerrimo carnosio.

*Tribrachia pendula*. *Lindley in Bot. Reg.* t. 963.

Hab. in *Sierra Leone*. (v. v. cult.)

Flores virescentes; rachi et labello purpureis. Pollinia 4, omnia cohærentia, interioribus obsoletis.

31. *BOLBOPHYLLUM tetragonum*.

B. pseudo-bulbis ovatis acutè tetragonis, foliis solitariis, rachi tetragonâ pubescente, bracteis oblongis acutis dorso pubescentibus capsularum longitudine, sepalis ovatis æqualibus, petalis subulatis, labello ovato apiculato margine membranaceo serrato.

Hab. in *Sierra Leone*. (v. v. cult. sine floribus, et s. spontaneum.)

Exemplar seminiferum et spicæ partem tantùm vidi. Rachis flexuosa tetragona sulcata, pilis nigris raris adpersa. Bractæe cymbiformes, subtus pilosæ, florum longitudine, sessiles, semiamplexicaules. Flores parvi, recti, sepalis ovatis, conniventibus, æqualibus, petalis subulatis columnâ paulò longioribus erectis. Columna subrotundo-ovata, anticè alata (alis marginem rotundatum formantibus a basi anticâ usque ad cardinem antheræ, ubi in processu ovato connascuntur) callo plano prominente elliptico transverso ad ipsam basin anteriorem. Stigma pulvinatum subquadratum, in facie columnæ intra margines. Labellum minimum, oblongum, carnosum, marginatum, faciei columnæ incumbens apice reflexo, marginibus tenuibus serratis.

This curious little plant was formerly cultivated in the Garden of the Horticultural Society, but is now lost. It is frequently sent from *Sierra Leone* mixed with other epiphytes, and is, I should think, very common in that colony.

32. *BOLBOPHYLLUM polyrhizum*.

B. pseudo-bulbis ovatis cæspitosis, foliis . . . . ., scapis erectis, spicis laxis erectis 5-6-floris, sepalis ovatis obtusis æqualibus, petalis minimis, labello sessili ovato obtuso integerrimo.

Hab. in *India Orientali*; *Wallich*. (v. ic. pict.)

Pseudo-bulbi atrovirides. Flores viridi lutei.

33. *BOLBOPHYLLUM cylindraceum*.

B. pseudo-bulbis nullis, foliis solitariis oblongo-lanceolatis petiolatis scapis duplò brevioribus, spicâ densissimâ cylindraceâ ad basin spathâ involutâ,

sepalis lateralibus semiovatis planis collateralibus: supremo minore, petalis minimis ovatis obtusis, labello ovato obtuso.

Hab. in *India Orientali*; Wallich. (v. ic. pict.)

Folia pedalia, atroviridia, squamis cinnamomeis ad basin. Scapi sesquipedales, erecti; spicæ 6-unciales. Flores albi, densissimè imbricati, labello et sepalis lateralibus semper posticis planis: supremo antico abbreviato acuto.

I know this very remarkable plant only from an excellent drawing in Dr. Wallich's possession. It is not more remarkable for its very dense imbricated flowers, which have a great spathe-like bractea at the base of their spike, than for the want of the spurious bulbs, which are, with this single exception, characteristic of the genus.

34. *BOLBOPHYLLUM gibbosum*.

B. "foliis petiolatis lanceolatis obtusiusculis coriaceis, labelli limbo obtuso lineato margine nudo, ungue gynostemii gibboso." *Blume*.

*Diphyes gibbosa*. *Blume Bijdr.* 312. tab. 66.

Hab. in sylvis altioribus montis Salak, *Javæ*, florens Junio; *Blume*.

"Caules radicantes ebulbi. Pedunculi elongati, solitarii, spicato-multiflori. Gynostemium bifidum. Flores pallidè flavi, labello aurantiaco basi canaliculato. *Variat* foliis acuminatis." *Blume*.

35. *BOLBOPHYLLUM odoratum*.

B. "foliis petiolatis lanceolatis nervosis, labello internè glanduloso." *Blume*."

*Diphyes odorata*. *Blume Bijdr.* 312.

Hab. in truncis arborum ad originem fluvii Tjiburrun, *Javæ*, florens Junio; *Blume*.

"Caules radicantes ebulbi. Pedunculi elongati, solitarii, spicato-multiflori. Gynostemium bifidum. Flores flavi parvi odoratissimi." *Blume*.

36. *BOLBOPHYLLUM flavescens*.

B. "foliis breviter petiolatis lineari-lanceolatis, pedunculo basi vaginato multifloro, labelli limbo obtuso ciliato." *Blume*.

*Diphyes flavescens*. *Blume Bijdr.* 313.

Hab. in montosis *Javæ* supra arbores; *Blume*.

"Caules radicantes ebulbi. Pedunculi elongati, solitarii, spicato-multiflori. Gynostemium bifidum. Flores pallidè flavi, sepalis exterioribus acuminatis inæqualibus; labellum infernè carinatum aurantiacum. *Variat*  $\alpha$ , spicis trifloris, floribus concoloribus;  $\beta$  foliis latioribus longiter petiolatis, spicis multifloris, floribus minoribus concoloribus, labello angusto." *Blume*.

37. ? *BOLBOPHYLLUM pumilum*.

B. "caule radicante filiformi bulbifero, bulbis monophyllis, folio oblongo, scapis basilaribus tenuissimis elongatis apice flexuosis." *Swartz*.

*Dendrobium pumilum*. *Swartz. Pers. syn.* 2.523.

Hab. in *Sierra Leone*; *Swartz*.

§ III. *Flores spicati; rachi clavata v. incrassata.*38. *BOLBOPHYLLUM clavatum. Thouars.*

*B. pseudo-bulbis ovatis diphyllis, foliis oblongo-loratis emarginatis obtusis, rachi clavata, floribus semi-immersis, sepalis lateralibus connatis.*

*Bulbophyllum conitum. Thouars orch. Afr. t. 100.*

*Bulbophyllum clavatum. Id. t. 99. A. Rich. orch. Maur. p. 61.*

*Hab. in Mauritio; Thouars.*

*Flores purpurascentes. Pollinium solitarium, subbilobum. A. Rich.*

*Obs. Medium inter Bulbophyllum et Lyræam, illius speciebus conveniens labello, petalis et habitu, vix hac ob sepala lateralibus connata consociandum.*

39. *BOLBOPHYLLUM pusillum. Thouars.*

*B. rhizomate filiformi, pseudo-bulbis subquadratis foliorum magnitudine, foliis solitariis oblongis obtusis, scapis erectis foliis longioribus, rachi clavata, sepalis ovatis, petalis linearibus, labello ovato-cordato carnoso integerrimo.*

*Bulbophyllum pusillum. Thouars t. 102. A. Rich. p. 64.*

*Hab. in Mauritio; Thouars.*

40. *BOLBOPHYLLUM cæspitosum. Thouars.*

*B. rhizomate repente intricato, pseudo-bulbis oblongis subquadratis, foliis geminis lineari-oblongis oblique retusis, scapis erectis foliis subæqualibus, rachi clavata, sepalis ovatis, petalis linearibus acutis, labello sagittato ovato obtuso.*

*Bulbophyllum cæspitosum. Thouars t. 103.*

*Hab. in Borbonia; Thouars.*

§ IV. *Flores capitati. (Cirrhopetalæ proxima.)*41. *BOLBOPHYLLUM radiatum. Lindl. in Wall. Cat. no. 1986.*

*B. rhizomate crasso, pseudo-bulbis elongatis teretibus, foliis oblongis apice integerrimis, scapis erectis filiformibus folio brevioribus, bracteis minimis, floribus capitatis radiatis, sepalis acuminatissimis acutis.*

*Hab. in Tavoy, Indiæ Orientalis, Wallich. (hab. s. sp. e Museo Anglo-Indico.)*

*Sepala æqualia. Petala longè aristata. Pollinia 4, per paria cohærentia interioribus minimis.*

This species differs from the next in its very taper sepals, in the petals being also finely acuminate, in its obsolete bractæ, and in the squamæ of the scape being very small, not dilated as in *B. odoratissimum*. It approaches *Cirrhopetalum* from which it differs in the equal size of its sepals, and it forms a transition from *Cirrhopetalum* to *Bolbophyllum*.

42. *BOLBOPHYLLUM odoratissimum. Lindl. l. c. no. 1987.*

*B. rhizomate filiformi repente, pseudo-bulbis cylindræis, foliis solitariis oblongis striatis retusis, scapis erectis folio brevioribus, bracteis membranaceis acuminatis floribus capitatis subæqualibus, sepalis carnosissimis acuminatis obtusis.*

*Stellæ odoratissima. Smith! in Rees.*

*Stellæ candata. Don. Prodr. 32.*

*Tribrachia odoratissima. Lindl. Coll. 41.*

Hab. in *Napalia*, Wallich; fortè etiam in *China*. (hab. s. sp. e Museo Anglo-Indico.)

Flores in capitulis rotundis, depressis. Bractæ longæ scariosæ, persistentes. Sepala antica basi connata. Petala minuta, membranacea, obtusa. Labellum parvum, ovatum, carnosum, sulcis tribus in medio, in columnam pronum. Columna apice bicornis. Pollinia per paria coherentia, interioribus minoribus.

There is a Chinese drawing in the collection of the Horticultural Society of what appears to be this species.

43. *BOLBOPHYLLUM umbellatum*. Lindl. l. c. no. 1984.

B. rhizomate repente, pseudo-bulbis ovatis subangulatis, foliis solitariis lineari-loratis obtusis emarginatis, scapis foliis triplè brevioribus, floribus corymbosis, sepalis lateralibus obliquis falcatis obtusis majoribus, petalis ovatis obtusis, labello cordato ovato complicato integerrimo, columnâ marginatâ bicorni.

Hab. in *Napalia*, Wallich. (hab. s. sp. *defloratum* e Museo Anglo-Indico, et v. ic. pict.)

Flores subumbellati, virides, longè pedunculati, majores. Sepalum supremum lateralibus multò minus. Pollinia tantum 2, ex icone Wallichiano.

44. *BOLBOPHYLLUM caudatum*. Lindl. l. c. no. 1983.

B. rhizomate filiformi intricato, pseudo-bulbis ovatis subquadratis, foliis ovatis solitariis, floribus capitatis, scapis pseudo-bulbis æqualibus, sepalis lateralibus longissimè filiformi-acuminatis: supremo acuminato, petalis minutis ovatis, labello trilobo, columnâ bicorni.

Hab. in *Napalia*, Wallich. (habeo s. sp. e Museo Anglo-Indico, et v. ic. pict.)

This beautiful little species is at once recognized by the long filiform terminations of its lateral sepals, and the shorter termination of the upper. The flowers are small, pure white, and almost hidden among the leaves.

45. *BOLBOPHYLLUM capitatum*.

B. "bulbis remotis compressis, foliis lanceolatis acutis, pedunculo brevi, floribus 5-7 laxè capitatis bracteis canaliculatis cinctis." Blume.

Diphyes capitata. Blume p. 314.

Hab. ad truncos arborum in sylvis primævis Gede et Salak, *Javæ*, florens Aprili; Blume.

"Flores mediocres, pallidè flaventes, sepalis exterioribus acuminatis, lateralibus dorsali majoribus; interioribus obtusis: labellum tumidum, basi canaliculatum; limbus obtusus. Variat bulbis teretiusculis et subcompressis, foliis acutiusculis v. obtusis." Blume.

46. *BOLBOPHYLLUM obtusum*.

B. "bulbis subremotis, foliis lineari-lanceolatis obtusis, pedunculo brevi apice 2-3-floro." Blume.

Diphyes obtusa. Blume p. 315.

Hab. in sylvis obscurioribus montium Gede et Salak, *Javæ*, florens Aprili Maio; Blume.

"Planta pusilla; flores pallidè flaventes, sepalis exterioribus acuminatis: lateralibus dorsali majoribus apice incrassatis, interioribus acutis; labelli limbo obtuso. Variat bulbis fusinis et ovatis, et etiam latitudine foliorum." Blume.

47. *BOLBOPHYLLUM sulcatum*.

B. "bulbis ovatis oblongis sulcatis remotis; foliis lineari lanceolatis obtusis, pedunculis filiformibus folio longioribus 3-floris, sepalis exterioribus acuminatis subæqualibus." *Blume*.

*Diphyes sulcata*. *Blume* p. 314.

Hab. in cacumine montis Salak, *Javæ*, florens Augusto; *Blume*.

"Planta pusilla, hinc *T. angustifoliæ* inde *T. obtusæ* affinis, floribus pallidè flavescens." *Blume*.

48. *BOLBOPHYLLUM angustifolium*.

B. "bulbis fusinis remotis, foliis lineari-lanceolatis acutis, pedunculis folio brevioribus, floribus laxè capitatis." *Blume*.

*Diphyes angustifolia*. *Blume* p. 314.

Hab. in montosis Gede et Salak, *Javæ*, florens Junio Octobri; *Blume*.

"Flores parvi, sepalis exterioribus acuminatis apice aurantiacis. *Variat* bulbis ovatis, foliis lanceolatis obtusiusculis v. obtusis, in sylvis montis Salak prope Passir *Javæ*, florens Augusto." *Blume*.

49. *BOLBOPHYLLUM croceum*.

B. "bulbis remotis, foliis lato-lanceolatis, pedunculis nutantibus, floribus densè capitatis." *Blume*.

*Diphyes crocea*. *Blume* p. 313.

Hab. in sylvis montosis Salak et Burangrang, *Javæ*, florens Junio Novembri; *Blume*.

"Flores crocei, sepalis exterioribus longissimè acuminatis. Labellum crassum; limbus internè pubescens. *Variat* floribus pallidè flaventibus foliis angustioribus." *Blume*.

50. *BOLBOPHYLLUM laxiflorum*.

B. "bulbis remotis, foliis lanceolatis, pedunculis cernuis." *Blume*.

*Diphyes laxiflora*. *Blume* p. 316.

Hab. ad margines fluvii Tjiapus supra arbores, *Javæ*, florens Decembri; *Blume*.

"Flores pallidè flavi, sepalis acuminatis; labellum internè linea prominente notatum, infernè aurantiacum."

*Species dubiæ v. parùm cognitæ.*

51. ? *BOLBOPHYLLUM serpens*.

B. "caule radicante bulbifero, bulbis diphyllis, foliis ovatis, scapis radicalibus." *Swartz*.

*Cymbidium reptans*. *Swartz* nov. act. Ups. 6. p. 71.

*Dendrobium reptans*. *Swartz* act. Holm. 1800. p. 247. *Willd.* no. 25. *Pers. syn.* 2. 523.

Hab. in *Mauritio*; *Swartz*.

52. ? *BOLBOPHYLLUM galeatum*.

B. "caule communi reptante radicante, partialibus vaginatis monophyllis, folio lato-lanceolato obtuso, racemo multifloro, floribus conicis incurvo-galeæformibus." *Swartz*.

*Dendrobium galeatum*. *Swartz* *Pers syn.* 2. 523.

May, 1830.

Hab. in *Sierra Leone*; *Afzelius*. (*adest in Herb. Banks.*)

Non *Dendrobium*, viz *Bolbophyllum*; nescio quid. Flores magui, desiccatione nigri, verosimiliter carnosii.

53. *BOLBOPHYLLUM* pygmæum.

B. rhizomate repente filiformi, foliis solitariis subsessilibus ellipticis pubescentibus coriaceis.

*Dendrobium* pygmæum. *Smith in Rees.*

Hab. in *Nova Zelandia*. (v. s. *defloratum in Herb. Smith.*)

"Stems thread-shaped, slender. Leaves alternate on very short footstalks, elliptical, obtuse, revolute, coriaceous rather than fleshy; ribbed and roughish beneath; clothed above with short, prominent downy hairs. Each footstalk proceeds from a little round bulb like a ring, smooth and shining yellowish and much wrinkled in a dry state but apparently very succulent when fresh." *Smith l. c.*

### XXXII. CIRRHOPETALUM.

*Cirrhopetalum*. *Lindl. in Bot. Reg.* 832. (Oct. 1824). *Orch. seel.* no. 149.—*Zygoglossum*. *Reinwardt in Bot. Zeitung* 1825. vol. 2. p. 4.

Sepala ringentia: lateralibus acuminatis, valdè obliquis, basi productæ columnæ adnatis, supremo multò longioribus. Petala nana apiculata. Labellum integrum, cum basi columnæ articulatum. Columna minima basi longè producta, apice cornubus duobus petaloideis. Anthera bicularis. Pollinia 4, quorum 2 interiora multò minora, lamelliformia.—Herbæ epiphytæ, rhizomate repente, pseudo-bulbos monophyllos gerente. Folia coriacea avenia. Flores densè racemosi, nunc radiati, in apice scapi radicalis.

The great obliquity of the base, and elongation of the apex of the lateral sepals distinguish this from *Bolbophyllum*, with which it is connected through *B. caudatum* which has a short upper sepal.

1. *CIRRHOPETALUM* Thouarsii. *Lindl.*

C. petalis ciliatis sepaloque supremo aristatis, foliis oblongis obtusis emarginatis scapo brevioribus.

*Epidendrum umbellatum*. *Forst. l.* non *Swartzii*.

*Bolbophyllum longiflorum*. *Thouars orch. Afr.* t. 98.

*Cirrhopetalum* Thouarsii. *Lindl. in Bot. Reg.* 832 in textu.

*Zygoglossum umbellatum*. *Reinw. l. c.*

*Cymbidium umbellatum*. *Spreng. syst.* 3. 723.

Hab. in *Otaheite* (*Forster*); in *Java* (*Reinwardt*); in *Mauritio* et *Madagascar* (*Thouars*). (v. s. *sp. in Herb. Banks. sine floribus.*)

Flores fuscii; *Thouars*.

2. *CIRRHOPETALUM* Roxburghii.

C. petalis ciliatis acutis, sepalis omnibus acuminatis, foliis lanceolatis, umbellâ radiatâ multiflorâ.

*Aerides radiatum*. *Roxb. Mus. in Musco Indico.*

Hab. arborum epiphytum ad ostia *Gangis*, florens tempore pluvioso; *Roxburgh*.

Affinitatem cum *C. Wallichii* indicavit cl. *Wallich*. Folia 3-4 uncias longa,

unâ latitudine minora. Scapus umbellam 10-12-floram gerens. Flores lutei: sepalum supremum et petala purpureo-venosa: sepala lateralibus basi leviter connata supremo quintò v. sextò longiora, falcata. Columna anticè alata. *Roxb. Mus.*

3. *CIRRHOPELALUM vaginatum*. *Lindl. in Wall. Cat. no. 1979.*

C. sepalò supremo obtuso mutico; inferioribus longissimè acuminatis, vaginis scapi oblongis obtusis ventricosus, racemo paucifloro recurvo.

Hab. ad *Singapore*, supra arbores crescens, florens Octobri, *Wallich*. (v. s. sp. in *Herb. Mus. Anglo-Ind.*)

Rhizoma repens tortuosum. Pseudo-bulbi parvi ovato-oblongi. Folia ignota. Scapus 4 uncias altus vaginis tribus vestitus. Racemus brevis recurvus, 4-5-florus, bracteis acuminatis elongatis.

4. *CIRRHOPELALUM Blumii*.

C. petalis pubescentibus acutis, sepalis omnibus acuminatis, foliis linearilanceolatis, pedunculis unifloris.

*Ephippium ciliatum*. *Blume Bijdr. 309. tab. 65.*

Hab. in sylvis altioribus montis Salak, *Javæ*, florens Junio; *Blume*.

Pseudo-bulbi ovati, sulcati. Sepalum dorsale canaliculatum infernè ciliolatum. Labellum orbiculatum longissimè cuspidatum. Columna bicornis; ex *Blume*.

5. *CIRRHOPELALUM Wallichii*. *Lindl. l. c. no. 1980.*

C. petalis sepaloque supremo oblongis retusis muticis, foliis oblongo-lanceolatis obtusis scapi longitudine.

Hab. in *Napalia*, *Wallich*. (hab. s. sp. e *Mus. Angl. Ind. et v. ic. pict.*)

Species cæteris duplò minor, caule filiformi pseudo-bulbifero. Pseudo-bulbi ovati monophylli. Folia coriacea, 3 uncias longa, obtusa, subseptem-venia, subtus purpurea punctulata. Scapi radicales 3-unciales squamis circiter tribus vestiti. Umbellæ 4-floræ, (6-8-floræ, *Wall.*) bracteis paucis subulatis. Flores fulvi, horizontales. Petala et sepalum supremum conformia trivenia, basi leviter sanguinea; sepala lateralibus basi torta, falcata, acuminata. Labellum ovatum conduplicatum integerrimum petalis multò minus, cum pede incurvo columnæ articulatam, intus punctatam. Columna bidentata. Pollinia 2? potius 4 per paria agglutinata. *Ad iconem Wallichianam.*

6. *CIRRHOPELALUM Macraei*.

C. petalis apiculatis nudis, sepalis omnibus acuminatis, foliis oblongo-lanceolatis obtusis emarginatis scapo subæqualibus.

Hab. in sylvis *Zeylonæ* arboribus insidens; *Macrae*. (habeo s. sp. et v. ic. pict.)

Umbella pauciflora. Flores pallidè virides fusco-rubro venosi. Sepalum supremum acuminatum; lateralibus valdè elongata acuminatissima cum basi valdè producta columnæ connata. Petala falcata, sepalò supremo paulò minora, obtusa, purpurea, apiculata, glabra. Labellum non vidi, cum columnæ pede articulatam. Columna libera, utrinque alata, ad apicem in cornua duo membranacea falcata hinc bidentata elongata. Pollinia 4, quorum duo interiora multò minora lamelliformia.



## XXXIII. TRIAS.

Sepala æqualia, ovata, patentia, basibus suis connata, a pede columnæ ferè libera. Petala minima, erecta. Labellum minimum, indivisum, in columnam primum et cum ejus basi producta articulatum, ad latera leviter semidentatum. Columna nana, semiteres, marginata, libera. Anthera bilocularis, apice in membranam petaloideam, cuneatam, emarginatam, producta. Pollinia 4, duobus interioribus minoribus.—Herbæ minimæ, pseudo-bulbis subrotundis glabris cæspitem densum formantibus, monophyllis, foliis parvis coriaceis aveniis. Pedunculi erecti, radicales, foliis breviores, uniflori. Flores majusculi, viridi-fusci, aperti triangulum efficientes.

Est Stelis inter Dendrobieas.

1. *TRIAS oblonga*. *Lindl. in Wall. Cat. no. 1977.*

T. foliis oblongis.

Hab. in Moalmy, *Indiæ Orientalis*, *Wallich. (hab. s. sp. ex Herbario Angl. Ind. et v. ic. pict.)*

Flores fusco-virides, labello purpurascente, petalis fusco-viridibus.

2. *TRIAS ovata*.

T. foliis ovatis.

Hab. in *India Orientali*, *Wallich. (v. ic. pict.)*

An prioris mera varietas, foliorum formâ et labello viridi nec purpureo præcipuè diversa. Petala alba rubro striata.

## XXXIV. MACROSTOMIUM.

*Macrostomium. Blume Bijdr. p. 335. t. 37.*

Sepala reflexa; lateralibus cum basi producta columnæ in calcar breve obtusum connatis. Petala minora, reflexa. Labellum ecalcaratum, unguiculatum, medio dilatatum, concavum, cum ungue columnæ basi connatum, eodem continuum; limbo elongato, spatulato, emarginato, recto, supra columnam fornicato. Anthera denti dorsali columnæ inserta, bilocularis, convexa. Pollinia duo, bipartibilia, ovato-oblonga, cereacea, margini stigmatis ligulato adhærentia. *Ex Blume.*

This appears to differ from *Aporum* in nothing but its reflexed sepals; a character however of no mean importance.

1. *MACROSTOMIUM aloefolium. Blume l. c. t. 37.*

Hab. in arboribus excelsis montis Salak, *Javæ*, florens Junio; *Blume.*

## XXXV. MICROCÆLIA.

Sepala libera, æqualia. Petala conformia, paulò minora. Labellum cum columna articulatum, calcaratum, calcare ventricosum, limbo nano indiviso. Columna minima, libera, cum ovario continua. Anthera stipitata, apice membranacea, bilocularis. Pollinia libera, in oculis solitaria, medio foveata.—Herba fortè aphylla, caulescens, radicibus numerosissimis intricatis. Spicæ plurimæ ascendentes filiformes. Flores minutissimi.

1. *MICROCÆLIA exilis*.

Hab. in *Madagascar* supra arborum ramulos; *Forbes*. (*hab. s. sp. Soc. Hortic. benignè commun.*)

Sepala ovata, obtusa. Calcar ad os constrictum. Pollinia depressa, rotunda, versus medium foveâ magis pellucidâ, quasi reniformia apicibus approximatis.

For my specimens of this very curious little plant I am indebted to the Horticultural Society, who received it from Mr. Forbes. It has the smallest flowers of any Orchideous plant I know; it grows upon the young branches of trees covering them with its numerous thread like roots. It appears to be leafless.

I suspect that *Angræcum aphyllum* of Du Petit Thouars, t. 73. belongs to this genus.

## XXXVI. EPICRANTHES.

*Epicranthes*. *Blume Bijdr.* 306. tabellen 9.

Sepala tria, patentia. Petala multifida, laciniis clavatis carnosis appendiciformibus (nulla ex *Blume*, qui petala processus columnæ appellat). Labellum sepalis brevius, integrum, margine revolutum, glandulosotumidum, articulatione irritabili cum columnæ ungue incurvo unita. Columna simplex. Anthera semibilocularis. Pollinia 2, ovata.—Herba epiphyta, caulibus scandentibus vaginatis pseudo-bulbiferis; pseudo-bulbis tetragonis monophyllis. Folia ovalia suprâ convexa, subtus concava. Pedunculi uniflori, e caule ad basin foliorum orti.

Char. ex *Blume*.

1. *EPICRANTHES Javanica*. *Blume l. c.*

Hab. in altis montibus *Javæ* supra arbores, florens Septembri et Decembri; *Blume*.

## XXXVII. MONOMERIA.

Sepala ringentia, inæqualia, lateralibus a supremo valdè distantibus, intervallo denticulato, basi invicem et cum pede columnæ connatis intus barbatis. Petala 0. Labellum cum pede columnæ articulatum, incumbens, ovatum, trilobum, lamellis 4 parallelis in disco, lobis lateralibus antrorsum falcatis apice bidentatis. Columna basi longè producta, semiteres, apice cornubus duobus minutis. Anthera cristata, unilocularis. Pollinia 4, in massam singulam cohærentia.—Herba rhizomate crasso repente, pseudo-bulbos gerente. Folia solitaria, coriacea, avenia. Racemi radicales multiflori.

Note. This is the only known genus of Orchidæ in which the petals are abortive. Nothing is found in their room, but there is a wide toothletted interval between the upper and lower sepals.

1. *MONOMERIA barbata*. *Lindley in Wallich. Cat.* no. 1978.

Hab. in *Napalia*, *Wallich*. (*hab. s. sp. e Museo Angl. Ind.*)

Pseudo-bulbi ovati. Folia longissimè petiolata, pedalia, erecta. Racemus

foliis brevior. Scapus pallidus, squamulis quibusdam, maculatus. Flores pallidi, purpureo-maculati. Labellum lutescens. Pes columnæ densè purpureo punctata.

### XXXVIII. STENOGLOSSUM.

*Stenoglossum. Kunth in Humb. et Bonpl. Nov. gen. et sp. pl. 1.356.*

Sepala clausa : lateralibus cum basi columnæ connatis, æquilateris. Petala minora. Labellum posticum, cum columna in urceolum connatum, limbo spatulato longè pedunculato. Anthera bilocularis. Pollinia 4, libera.—Herba epiphyta, caulescens. Caulis foliosus, simplex. Flores terminales, spicati, pedicellati, bracteati.

Character ex Kunth.

1. *STENOGLOSSUM coriophorum. Kunth.*

*Stenoglossum coriophorum. Kunth l. c. t. 87. Synops. 1.340.*

*Stenoglossum corynephorum. Spreng. syst. 3.742.*

Hab. in Andibus Regni *Novo-Granatensis*, alt. 1080 hex. florens Novembri; Humboldt et Bonpland.

### XXXIX. DIGLYPHOSA.

*Diglyphosa. Blume Bijdr. 336. tabellen 60.*

Sepala erecta, subringentia. Petala latiora. Labellum concavum, intus membranaceo-cristatum, ungui columnæ elasticè adhærens, ascendens; limbo indiviso patente. Columna supernè incurva. Anthera convexa, anticè bifida, bilocularis. Pollinia 2, angulata, compressa.—Herba terrestis ebulbis. Radices (Rhizoma) repentes, fibrosæ. Caulis teres, subcarnosus, apice monophyllus. Folium membranaceum, nervosum, elliptico-lanceolatum, glabrum. Pedunculus radicalis, basi vaginatus, spicato-multiflorus. Flores pedicellati, bracteati.

Character ex Blume.

1. *DIGLYPHOSA latifolia. Blume l. c.*

Hab. in umbrosis montanis Meggamedong, insulæ *Javæ*, florens Aprili; Blume.

### XL. MYCARANTHES.

*Mycarantes. Blume Bijdr. p. 352. t. 57.*

Sepala clausa v. patentia, æqualia v. inæqualia, extûs lanata, lateralibus pedi columnæ adnatis sed nullo modo obliquis. Petala minora. Labellum cum basi producta columnæ articulatum, trilobum, cucullatum, disco cristato v. appendiculato. Columna nana, basi longè producta marginibus alatis introflexis. Anthera terminalis, bilocularis, loculis quadrilocellatis. Pollinia 8, parva, ovata.—Herbæ in arboribus, v. rupibus crescentes, caulescentes. Folia carnosa, v. coriacea, non plicata. Racemi terminales multiflori.

This genus differs from *Eria* in nothing but its dwarf column the margins of which are inflexed, and the want of obliquity in the lateral sepals; but as its habit is peculiar I do not hesitate to adopt it.

1. *MYCARANTHES obliterata*. Blume.

M. "labelli lobo medio obliterato, foliis subcoriaceis." Blume l. c.

Hab. in sylvis montium Salak, Gede, &c. *Javæ*, florens Junio Septembri; Blume.2. *MYCARANTHES latifolia*. Blume.

M. "labelli lobo medio abbreviato eroso, sepalis exterioribus versus apicem incrassatis foliis lato-linearibus subcarnosis." Blume l. c. t. 57.

Hab. in sylvis obscurioribus montis Salak, *Javæ*, florens Julio Augusto; Blume.3. *MYCARANTHES lobata*. Blume.

M. "labelli lobo medio dilatato undulato sub-bilobo, foliis rigidis." Bl. l. c.

Hab. in montosis Salak, Pantjar, Seribu, &c. *Javæ*, florens per fere totum annum; Blume.4. *MYCARANTHES stricta*. Lindl. in Wall. Cat. no. 1970.

M. caulibus teretibus, spicâ secundâ densâ multiflorâ, labello scrotiformi per medium calloso, perianthio lanato clauso, columnæ marginibus alatis introflexis, foliis 1-2 lineari-lanceolatis sessilibus.

Octomeria secunda. Wallich. Mss.

Eria stricta. Lindl. Coll. t. 41. B.

Hab. in *Napalia* supra arbores et rupes, Wallich. (hab. s. sp. e Museo Anglo-Indico.)

Flores extus glauci, intus pallidè ochroleuci.

## XLI. PHREATIA.

*Dendrolirii pars. Blume.*

Sepala conniventia, subæqualia: lateralibus cum basi producta columnæ connatis. Petala minora conformia. Labellum integrum, carnosum, cum pede columnæ articulatam. Columna nana, clinandrio altè immerso: margine membranaceo subintegro. Anthera intra clinandrium inclusa, bilocularis; loculis obsoletè 4-foveatis. Pollinia 8, spherica, materie viscidâ coherentia.—Herbæ cæspitosæ, epiphytæ, pseudo-bulbosæ. Folia non plicata. Scapi radicales.

Obs. Character ad *P. elegantem* solam confectus; species *Blumianæ* ob habitum huc relatæ.1. *PHREATIA elegans*.

P. foliis linearibus coriaceis apice obliquis emarginatis, scapis gracilibus foliis longioribus subnutantibus, apicis multifloris, labello ovato obtuso intus piloso.

Hab. super arbores in sylvis montosis pagi Peradeniæ, *Zeylonæ*; *Macrae*. (hab. s. sp. et ic. pict.)An *Phr. laxiflora* eadem?

Sepala conniventia acuta: lateralibus majoribus basi paululum v. vix obliquis; contextu valdè laxo cellulari. Petala conformia, paulò minora, acuta. Labellum indivisum, basi productæ columnæ affixum, ovatum, carnosum. Flores albi.

2. *PHREATIA retusa*.

P. "bulbis ovato-globosis 2-3-phyllis, foliis linearilanceolatis obliquè retusis subcarnosis, spicis brevibus densifloris." *Blume*.

*Dendrolirium retusum*. *Blume* p. 351.

Hab. in altis montis Salak, *Javæ*, florens Julio Septembri; *Blume*.

Planta pusilla.

3. *PHREATIA laxiflora*.

P. "foliis membranaceis linearibus apice inæquali-obtusis, spicis folio valde longioribus strictis laxifloris, labelli limbo dilatato concavo." *Blume*.

*Dendrolirium laxiflorum*. *Blume* p. 350.

Hab. prope catarractas fluvii Tjapus ad montem Salak, *Javæ*, florens Septembri Octobri; *Blume*.

4. *PHREATIA densiflora*.

P. "foliis membranaceis lato-linearibus inæquali-obtusis, spicis elongatis flexuosis densifloris, labello limbo ovato concavo." *Blume*.

*Dendrolirium densiflorum*. *Blume* p. 350.

Hab. prope catarractas fluvii Tjapus ad montem Salak, *Javæ*, florens Augusto Novembri; *Blume*.

5. *PHREATIA pusilla*.

P. "foliis membranaceis angusto-linearibus, spicis erectiusculis folio æqualibus, labelli limbo rotundato patente." *Blume*.

*Dendrolirium pusillum*. *Blume* p. 350. tab. 68.

Hab. in montosis Pantjar Provinciæ Buitenzorg, *Javæ*, florens Junio Augusto; *Blume*.

6. *PHREATIA secunda*.

P. "foliis carnosis angusto-linearibus, spicis nutantibus secundis folio subæqualibus, labelli limbo rotundato patente." *Blume*.

*Dendrolirium secundum*. *Blume* p. 350.

Hab. in montosis Pantjar Provinciæ Buitenzorg, *Javæ*, florens Junio Augusto; *Blume*.

"Planta pusilla *Dendrolirio* pusillo affinis, sed characteribus indicatis sat diversa." *Bl*.

7. *PHREATIA coriacea*.

P. "foliis coriaceis linearibus obliquè retusis, spicis erectis folio longioribus laxifloris, labelli limbo intus pubente dilatato concavo." *Blume*.

*Dendrolirium coriaceum*. *Blume* p. 351.

Hab. in sylvis montis Salak, *Javæ*, florens Augusto; *Blume*.

Affinis *P. laxifloræ*.

## XLII. ERIA.

*Eria*. *Lindl. in Bot. Reg.* 904.—*Dendrolirium*. *Blume Bijdr.* p. 343. t. 69.—*Pinalia*. *Lindl. orch. accl.* n. 71. p. 23. c. *tc.*

Sepala semipatentia, v. clausa, inæqualia, extûs lanata v. glabra, lateralibus basi valdè obliquis cum pede columnæ connatis calcar æmulantibus. Petala sepalo superiori æqualia v. minora. Labellum cum basi, producta columnæ articulatum, trilobum, rarè subintegrum, cucullatum, disco calloso, v. cristato. Columna basi longè producta. Anthera terminalis, bilocularis, loculis obsoletè 4-locellatis. Pollinia 8, nunc omninò libera, nunc materie elasticà glandulam mentiente cohærentia.—Herbæ in arboribus crescentes; caulibus carnosiss, vaginatis, cicatricibus foliorum notatis. Folia sæpiùs plicata. Racemi simplices, erecti, bracteis sæpiùs dilatatis. Flores nunc conspicui.

This genus is essentially distinct from *Octomeria*, in having the lateral sepals very oblique and connected with the elongated base of a short column, of which the foot is much longer than the column itself; and also in habit. *Eria* is a genuine genus of *Dendrobiæ* with the column incumbent upon the ovary; *Octomeria* on the contrary must be considered, notwithstanding the slight elongation of the base of its column, to belong to the genera characterized by the column being continuous with the ovary. In *Octomeria* the sepals are of equal size; in *Eria* the lateral sepals are much larger than the upper one.

1. *ERIA* paniculata. *Lindl. l. c.* no. 1971.

*E. foliis lineari-lanceolatis acuminatis subtùs glaucis, caulibus teretibus pendulis elongatis, racemis terminalibus aggregatis cylindraceis multifloris, sepalis lanatis ovatis obtusis petalisque minoribus guttatis, labello trilobo basi apiceque calloso: lobis guttatis: intermedio truncato.* *Lindley in Wall. Plant. Asiat. Rar.* vol. 1. p. 32. t. 36.

Hab. in Pundua, *Indiæ Orientalis*, Wallich. (*v. s. sp. in herb. Anglo-Indico.*)

2. *ERIA* flava. *Lindl. in Wall. Cat. nō.* 1973.

*E. foliis lanceolatis distichis basi dilatatis, caulibus ovalibus, sepalis densè lanatis ovatis, petalis minoribus glabris, labelli trilobi lobo medio recurvo crenulato apiculato, racemo erecto multifloro, bracteis ovato-lanceolatis ovarii longitudine.*

*Eria pubescens.* *Lindl. in B. Reg.* 904.

*Dendrobium pubescens.* *Hook. Esot. Fl.* t. 124.

*Octomeria flava.* *Wall.*

*Octomeria pubescens.* *Spreng. syst.* 4. 310.

Hab. in *Napalia*, Wallich. (*hab. s. sp. e Museo Anglo-Indico.*)

Flores viridi-flavescentes odorati, labello postico. Bractes membranaceæ fuscæ.

3. *ERIA* bicolor.

*E. foliis pluribus lanceolatis, caulibus elongatis attenuatis, sepalis petalisque æqualibus glabris ovatis patentibus, labelli trilobi lobo medio ovato acuto, racemo stricto multifloro foliis brevioribus, bracteis lanceolatis abbreviatis, rachi pubescente.*

Hab. ad Maturatam, *Zeylonæ*, supra arbores, *Macrae*. (*hab. s. sp. et ic. pict.*)

Caulis vaginis fuscis densè vestitus. Rachis roseo-purpurea. Flores can-  
May, 1830.

didissimi. Pollinia non vidi. Labellum medio lineis tribus elevatis sed cristâ nullâ.

4. *ERIA flavescens*.

E. "bulbis oblongis subcylindræis, apice 3-4-phyllis, foliis lanceolatis nervosis, spicis intrafoliaceis erectis stellato-pubentibus, bracteis coriaceis margine revolutis, labelli limbo intus discoideo-viscoso: lobo medio ovato obtuso." *Blume*.

*Dendrolirium flavescens*. *Blume p. 344. t. 69.*

Hab. in cortice arborum ad montes Salak, Tjerimai, &c. *Java*, florens Maio Octobri; *Blume*.

"Bracteæ flavescentes."

Huic et 5 sequentibus Labellum ungue columnæ majus, intus callosum v. crispatum, limbo subtrilobo. Bracteæ magnæ coloratæ. Flores speciosi rarius minuti. *ex Blume*.

5. *ERIA rugosa*.

E. "bulbis oblongis triquetris apice 1-2-phyllis, foliis oblongo-lanceolatis nervosis, spicis erectis sepalisque exterioribus tenuiter fusco-tomentosis, bracteis membranaceis, labello intus membranaceo-crispato, limbi lobo medio ovato acuto." *Blume*.

*Dendrolirium rugosum*. *Blume p. 345.*

Hab. in sylvis umbrosis montis Salak, *Java*, florens Septembri Octobri; *Blume*.

6. *ERIA ornata*.

E. "bulbis ovalibus compressiusculis sub-3-phyllis, foliis oblongo-lanceolatis rigidis nervosis, spicâ radicali vaginatâ sepalisque exterioribus fusco-tomentosis, bracteis coriaceis margine recurvis, labello intus crispato-cristato, limbi lobo medio acuminato." *Blume*.

*Dendrolirium ornatum*. *Blume p. 345.*

Hab. in sylvis altioribus Provinciarum Buitenzorg et Bantam, *Java*, florens Januario Martio; *Blume*.

"Bracteæ rubræ, demum aurantiacæ. Species pulcherrima."

7. *ERIA albido-tomentosa*.

E. "bulbis ovalibus compressis sub-3-phyllis, foliis lanceolatis rigidis, spicâ subradicali sepalisque exterioribus albido-tomentosis, bracteis membranaceis, labello intus crispato, limbi lobo medio acuto." *Blume*.

*Dendrolirium albido-tomentosum*. *Blume p. 345.*

Hab. ad arbores in vallibus Lowong Salassie Provinciæ Tjanjor, *Java*, florens Junio Julio; *Blume*.

8. *ERIA Hyacinthoides*.

E. "bulbis ovatis compressiusculis apice 2-phyllis, foliis lanceolatis basi carinatis coriaceis nervosis, spicis lateralibus erectis sepalisque nudis, bracteis minutis, labello intus calloso verrucoso: limbi lobo medio obtuso." *Blume*.

*Dendrolirium hyacinthoides*. *Blume p. 346.*

Hab. ad arborum truncos in declivitate occidentali montis Salak, *Java*, florens Septembri; *Blume*.

"Flores candidi."

9. *ERIA bicristata*.

E. "bulbis oblongis subcylindraceis vaginatis apice sub-3-phyllis, foliis lineari-lanceolatis coriaceis; spicâ laterali pauciflorâ sepalisque exterioribus tenuissimè sericeo-tomentosis, bracteis minutis, labello intus lineis 2 longitudinalibus hirsutis: limbi lobo medio incrassato." *Blume*.

*Dendrolirium bicristatum*. *Blume* p. 346.

Hab. in umbrosis montis Salak ad arbores *Javæ*, florens Januario; *Blume*.  
"Flores albidæ, ad basin labelli dilutè purpurei."

10. *ERIA rosea*. *Lindley*.

E. foliis coriaceis oblongo-lanceolatis solitariis in pseudo-bulbis costatis ovatis, sepalis glabris carinatis petalisque oblongis obtusis, labelli trilobi ungue bicostato lamina tricotatâ, spicâ axillari pauciflorâ, bracteis foliaceis floribus longioribus.

*Eria rosea*. *Lindley* in *B. Reg.* 978.

*Octomeria rosea*. *Spreng. syst.* 4.310.

Hab. in *China*. (v. v. cult.)

Surculi juniores e squamis magnis viridibus distichis mox ad margines emarcidis et pseudo-bulbum formantibus. Flores albo-rosei. Labelli cristæ luteo-aurantiacæ.

11. *ERIA stellata*. *Lindley*.

E. foliis lanceolatis carnosissimis 5-costatis, sepalis pubescentibus petalisque lineari-lanceolatis acuminatis, labelli tricotati lobis lateralibus obtusis intermedio acuminato, scapo elongato radicali multifloro ovarioque pube ferrugineâ lanatis.

? *Dendrobium javanicum*. *Swartz* in *act. Holm.* 1800. p. 247. *Willd.* n. 23.

*Eria stellata*. *Lindl.* in *B. Reg.* t. 904.

*Octomeria stellata*. *Spreng. syst.* 4.310.

Hab. . . . . Colitur in Hortis Angliæ ex *Java*, ut aiunt. (v. v. cult.)

12. *ERIA alba*.

E. foliis distichis basi vaginantibus plicatis, pseudo-bulbis ovatis cartilagineis multicotatis, sepalis petalisque oblongis subæqualibus glabriusculis, labelli trilobi medio tricallosi lobo intermedio ovato obtuso, racemis geminis terminalibus foliis æqualibus, bracteis subulatis.

*Octomeria alba*. *Wall.*

Hab. in monte Sheopore, *Napaliæ*, supra arbores crescens, *Wallich.* (hab. s. sp. communic. cl. *Rudge.*)

Flores albi mellis odorem spirantes. Labellum flavescens lobis lateralibus apice roseis; ex *Wallichio*.

13. *ERIA excavata*. *Lindl. l. c. no.* 1974.

E. foliis lanceolatis binis plicatis, caulibus oblongis obtusis sulcatis, sepalis basi pilosis petalisque oblongis obtusis, labelli trilobi tricarinati lobo medio emarginato, racemis lateralibus erectis foliis brevioribus, bracteis obovatis recurvis ovario multò brevioribus.

*Octomeria excavata*. *Wall.*

Hab. rariùs supra arbores montis Sheopore, *Napaliæ*, *Wallich.* (hab. s. sp. e Museo Anglo-Indico.)

Tota planta intensè viridi-cærulea. Rachis rosea pubescens. Bracteæ



pallidè virides, striatæ. Flores mediocres, (flavescentes, sepalis petalisque tenuissimè diaphanis, striis dilutissimis roseis notatis *ex Wallichio*). Labellum lobo medio olivaceo-purpureo. Columna teres stigmatè altè excavato, labio superiore ovato, inferiore maximo porrecto 4-dentato.

14. *ERIA pumila*. Lindl. l. c. no. 1972.

*E. foliis geminis lineari-lanceolatis plicatis caulibus teretibus erectis subæqualibus, sepalis petalisque acuminatis basi subpilosis, labelli trilobi ecallosi lobis lateralibus subulatis patentibus: intermedio ovato, spicis capitatis lateralibus subsessilibus.*

Hab. in Pundua, *Indiæ Orientalis, Wallich.* (*hab. s. sp. e Museo Anglo-Indico.*)

Ovarium pubescens. Sepala inferiora basi valdè producta. Vaginæ caulium latæ membranacæ.

15. *ERIA obesa*. Lindl. l. c. no. 1976.

*E. foliis . . . . ., caulibus crassis teretibus, sepalis petalisque obtusis subglabris, labelli trilobi ecallosi lobis lateralibus rotundatis: intermedio cuneato retuso, racemis paucifloris, bracteis lineari lanceolatis pedicello capsularum longissimarum vix æqualibus.*

Hab. ad Attran *Martabanæ, Wallich.* (*hab. s. sp. e Museo Anglo-Indico.*)

Exemplaria quædam vidi foliis destituta facie *E. excavatæ pumilæ* sed excavationibus nullis. Pedunculi 3-4-flori, ovarii semimaturis valdè elongatis. Pollinia defuere. Species distincta, sed recognoscenda.

16. *ERIA erecta*.

*E. "bulbis cauliformibus supernè compressiusculis, foliis lanceolatis acutis, spicis laxifloris oppositifoliis erecto-patentibus."* Blume.

*Dendrolirium erectum.* Blume p. 348.

Hab. in montanis Gede et Salak, *Javæ*, florens Martio Septembri; Blume.

"Flores mediocres, odorati. Variat caulibus hinc planis inde teretibus; spicis folio duplè brevioribus, in altioribus Salak." Blume.

Obs. Huic et speciebus tribus sequentibus labellum ungue columnæ majus, infernè processibus duobus inflexis instructum, pseudo-bulbi elongati, cylindracei, quasi cauliformes, infernè vaginati apice foliis instructi, spicæ oppositifoliæ, bractææ minutæ, flores parvi; *ex Blume.*

17. *ERIA abbreviata*.

*E. "bulbis cauliformibus teretibus, foliis lanceolatis acutis lucidis, spicis oppositifoliis brevissimis."* Blume.

*Dendrolirium abbreviatum.* Blume p. 348.

Hab. in altis montis Salak, *Javæ*, florens Junio; Blume.

18. *ERIA multiflora*.

*E. "bulbis cauliformibus teretibus, foliis lineari-lanceolatis acutis, spicis densifloris oppositifoliis nutantibus folio dimidio brevioribus."* Blume.

*Dendrolirium multiflorum.* Blume p. 349.

Hab. in sylvis obscurioribus montis Salak, *Javæ*, florens Junio, &c. Blume.

19. *ERIA micrantha*.

*E. "bulbis cauliformibus teretibus, foliis lineari-lanceolatis obtusiusculis, spicis densifloris oppositifoliis cernuis folio æqualibus."*

*Dendrolirium micranthum.* Blume p. 349.

Hab. in sylvis obscurioribus montis Salak, *Javæ*, florens Junio ; Blume.

"An varietas *E. multifloræ*, differt tantum foliis et floribus valdè minoribus."—An *Phreatia* ?

20. *ERIA robusta.*

*E.* "bulbis compressis vaginatis apice 2-phyllis, foliis lato-linearibus obtusiusculis rigidissimis, spicâ internè vaginatâ tomentosâ longitudine foliorum." Blume.

*Dendrolirium robustum.* Blume p. 347.

Hab. in montanis Provinciarum Buitenzorg et Tjanjor supra arbores, *Javæ*, florens Junio Septembri ; Blume.

"Flores flavescentes vel purpurascentes."

Huic et 3 sequentibus labellum ungue columnæ brevius, internè cucullatum, limbo indiviso, bractæ minutæ, flores parvi, sepala in omnibus ferè tomentosa, ex Blume.

21. *ERIA ebulbis.*

*E.* "foliis geminatis linearibus obtusis rigidis basi ferè ebulbis, spicis tomentosis folio dimidio brevioribus." Blume.

*Dendrolirium ebulbe.* Blume p. 347.

Hab. ad montem Salak, *Javæ*, florens Junio, &c. ; Blume.

"Flores internè purpurascentes."

22. *ERIA acuminata.*

*E.* "bulbis oblongis compressis 5-7-phyllis, foliis lineari-lanceolatis acuminatissimis rigidis, spicâ subtomentosâ longitudine foliorum." Blume.

*Dendrolirium acuminatum.* Blume p. 347. t. 69.

Hab. in altis montium Gede et Salak ad originem fluviorum supra arbores, *Javæ*, florens Maio Julio ; Blume.

"Flores intùs purpurei."

23. *ERIA sulcata.*

*E.* "bulbis ovatis sulcatis sub-2-phyllis, foliis lineari-lanceolatis coriaceis, spicis erectis supernè sulcatis nudis folio longioribus." Blume.

*Dendrolirium sulcatum.* Blume p. 347.

Hab. in sylvis humidis ad montem Gede, *Javæ*, florens Maio Junio ; Blume.

24. *ERIA appendiculata.*

*E.* "bulbis ovato-oblongis vaginatis 3-4-phyllis, foliis lanceolatis coriaceis obtusis, spicâ arachnoideo-tomentosâ longitudine foliorum." Blume.

*Dendrolirium appendiculatum.* Blume p. 352. t. 69.

Hab. in arboribus et ad ripas montium Salak, Gede, Burangrang, &c. *Javæ*, florens Maio Septembri ; Blume.

Generis valdè dubii. Fortè *Vandea* quædam.

## § PINALIA.

*Stigma prominens. Columna teres, clavata. Anthera dorsalis. Pollinia apice materie viscidæ cohærentia.*

I formerly thought that the characters by which the following species is distinguished were of sufficient importance to justify me in separating it from *Eria* as a particular genus, for which I accordingly adopted Dr. Hamilton's manuscript name of *Pinalia*. Subsequent experience has however led me to doubt the value of these characters unconnected with other differences, and I have accordingly reduced the genus to a subgenus of *Eria*. I may however observe that the degree of development of the viscid matter by which the pollen masses cohere is greater in *Pinalia* than in any other Malaxideous plant with which I am acquainted, and that it exhibits an instance of a near approach to the cartilaginous gland of *Vandææ*.

95. *ERIA convallarioides. Lindl. l. c. no. 1975.*

*E. foliis oblongo-lanceolatis distichis plicatis, caulibus compressis teretibus striatis, sepalis petalisque ovatis inæqualibus extus villosis, labello unguiculato ovato apice tridentato, spicis axillaribus oblongis densissimis pedunculatis foliis multò brevioribus, bracteis subulatis.*

*Octomeria spicata. Don. Prodr. 31.*

*Pinalia. Lindl. orch. secl. n. 71. p. 23. c. 1c.*

*Pinalia alba. Hamilton Mss. apud Don. Prodr.*

*Octomeria convallarioides. Wallich in ic. Bibl. Anglo-Indicæ n. 1141.*

*Hab. supra arbores Napaliæ ad Toka, et alibi, florens Julio, Wallich. (hab. s. sp. e Museo Anglo-Indico.)*

*Flores albi densissimi, magnitudine ferè Convallariæ majalis inodori; ex Wallichio. Labellum posticum. Capsulæ oblongæ, utrinque obtusæ, apteræ.*

## XLIII. APORUM.

*Aporum. Blume Bijdr. p. 334. t. 39.*

*Sepala carnosæ erecta, lateralibus majoribus obliquis cum basi producta columnæ connatis. Petala sepalo supremo minora. Labellum cum pede columnæ articulatum, posticum, indivisum v. trilobum: limbo cristato calloso v. nudo. Columna semiteres, basi longè producta. Anthera sessilis, bilocularis, nunc apice membranacea. Pollinia 4, per paria collateralia.—Herbæ epiphytæ, caulescentes. Folia disticha, equitantia, ancipitia. Flores subsolitarii, e paleis membranaceis erumpentes, sæpiùs herbacei coloris.*

Different as the plants of this genus are from *Dendrobium* in appearance, it is impossible to distinguish them by characters derived from the fructification; the distichous equitant leaves however offer an excellent mark of distinction.

1. *APORUM indivisum. Blume.*

*A. foliis ovatis carnosis obtusis, floribus solitariis terminalibus, sepalis carnosis: lateralibus ovatis obtusis patentibus supremo petalisque multò majoribus, labello postico oblongo cristato indiviso carnoso, caulibus erectis.*

*Aporum indivisum. Blume Bijdr. p. 334. t. 39. Wall. Cat. no. 2018.*

Hab. in montibus Seribu, *Javæ*, florens Februario Julio; Blume; ad *Singapore*, *Wallich.* (*habeo s. sp. defloratum e Museo Anglo-Indico, et v. ic. pict.*)

Flores ex icone in Museo Anglo-Indico lutescentes extûs obscurè purpurei, quam *A. ancipitis* duplè majores.

2. *APORUM* incrassatum. *Blume.*

*A.* "labelli limbo rotundato incrassato revoluto." *Blume p. 334.*

Hab. ad montem Salak, *Javæ*, florens Octobri; Blume.

3. *APORUM* lobatum. *Blume.*

*A.* "labelli limbo semitrifido, lobo medio rotundato crenulato." *Blume Bijdr. p. 334.*

Hab. in montanis Provinciæ Buitenzorg, *Javæ*, florens toto anno; Blume.

4. *APORUM* anceps. *Lindl. l. c. no. 2020.*

*A.* foliis scalpelliformibus carnosis acutis, floribus solitariis geminisve, sepalis carnosis: lateralibus ovatis patentibus supremo petalisque multò majoribus, labello postico unguiculato ecalloso inappendiculato cuneatò emarginato crenulato, caulibus pendulis.

*Dendrobium anceps. Swartz act. Holm. 1800. p. 246. Willd. no. 18. Bot. Reg. t. 1239.*

Hab. in *India Orientali* supra arbores præsertim ad æstuaria fluminum, *Wallich.* (*v. v. cult. et habeo s. sp. e Museo Anglo-Indico.*)

Flores virides, labello paululum colorato.

5. *APORUM* Serra. *Lindl. l. c. no. 2021.*

*A.* foliis scalpelliformibus acutis carnosis, floribus . . . . .; caulibus basi tantum foliosis apice aphyllis teretibus subramosis floriferis.

? *Dendrobium acinaciforme. Rosb. Mss.*

? *Herba supplex quinta. Rumphius 6. t. 51. f. 2.*

Hab. ad *Singapore* et *Penang*, *Wallich.* (*habeo s. sp. defloratum e Museo Anglo-Indico.*)

Flores, quos non vidi, e paleis membranaceis imbricatis brevissimis erumpunt ad partem aphyllam caulis densè fasciculatis.

I suspect that the figure above quoted from Rumphius may possibly be intended for this. It is however too uncertain to be quoted with confidence. The leaves are much narrower than in *A. Serra*; and the flowers of the latter have not been seen by me.

#### XLIV. OXYSTOPHYLLUM.

*Oxystophyllum. Blume Bijdr. p. 335. t. 38.*

Sepala erecta, lateralibus majoribus obliquis cum basi producta columnæ connatis. Petala sepalo supremo subæqualia. Labellum cum pede columnæ articulatum, indivisum: limbo carnosio, subdâs tuberculato. Columna semiteres, basi longè producta, clinandrio marginato. Anthera denti dorsali columnæ insidens, bilocularis, convexa. Pollinia 2 non partibilia.—Herbæ epiphytæ, caulescentes. Folia equitantia, ensiformia, basi vaginata, rigida v. carnosâ. Flores subcapitati, intra-foliacei, sessiles, paleis cincti.

Character ex icone et descriptione Blumii.

I know this genus chiefly by Blume's figure and description. It seems to differ from *Aporum* in nothing but having two pollen masses instead of four, and in the presence of a tubercle below the tip of the lip on the under side. I have not been able to satisfy myself upon the first point, in examining the flowers of Dr. Wallich's specimens of *O. carnosum*; but I presume Dr. Blume's observations, made upon fresh flowers are accurate as to this.

1. *OXYSTOPHYLLUM carnosum*. Blume.

*O. foliis lineari-lanceolatis acuminatis subfalcatis, racemis lateralibus paleis imbricatis distichis vaginatis, labello cuneato supra tomentoso: tuberculo apicis minuto, petalis erosis.*

Herba supplex prima. Rumphius 6. t. 50. f. 2.

*O. carnosum*. Blume l. c. t. 38.

*Aporum concinnum*. Lindl. in Wallich. Cat. Herb. Ind. no. 2019.

Hab. in sylvis montium Javæ, florens Julio, &c. Blume; Amboyna, Rumph. Wallich. (habeo s. sp. e Museo Anglo-Indico.)

Flores parvi coriacei. Sepala in sicco acuta, in vivo obtusiora (ex Blumii icone). Herba erecta, cæspitosa, palmaris, caulibus simplicibus, ad basin usque foliosis.

I originally considered this a species of *Aporum*, not having been able to procure any flowers; the examination of one or two withered blossoms has since enabled me to ascertain that it is the *Oxystophyllum carnosum* of Blume. Rumphius's figure is characteristic.

2. *OXYSTOPHYLLUM rigidum*. Blume.

*O. "foliis strictis coriaceis, labelli tuberculo obtuso."* Blume p. 336.

Hab. in sylvis montium Salak, Pantjar, &c. Javæ, florens toto anno; Blume.

3. *OXYSTOPHYLLUM excavatum*. Blume.

*O. "foliis rectis subcoriaceis, labelli limbo intus excavato extus convexo."* Blume l. c.

Hab. in sylvis altioribus montis Salak, Javæ, florens Decembri; Blume.

## XLV. POLYSTACHYA.

*Polystachya*. Hooker Exot. Fl. 103.

Sepala erecta, acuta: lateralibus majoribus cum basi producta columnæ connatis. Petala minora. Labellum sessile, cum basi producta columnæ articulatum, trilobum. Columna semiteres, brevis. Anthera bilocularis. Pollinia 4, collateralia, æqualia, per paria cohærentia.—Herbæ epiphytæ caulescentes nunc pseudo-bulbosæ. Folia leviter nervosa. Flores paniculati, parvi, alabastris trigonis.

When I published the type of this genus in my *Collectanea Botanica*, in 1821, I had seen only imperfect pollen masses; one lying in each cell of the anther. Subsequently Dr. Hooker, in founding the genus in his *Exotic Flora*, represented them adhering to a common pedicel and gland, 4 in number, and not lying side by side; but upon each other. Finally M. Achille Richard, in his account of the Mauritius Orchideous plants, states the number of pollen masses to be 2, without any stalk or gland. All these observations are however inaccurate, as I have recently satisfied myself

from an examination of good specimens sent from Ceylon by Mr. Macrae. The pollen masses are in reality 4 in number and lie loosely side by side, two in each cell of the anther.

1. *POLYSTACHYA luteola*. *Hooker*.

*P. spicâ paniculatâ, foliis oblongo-lanceolatis multinerviis scapo brevioribus, floribus ovariisque glabris.*

*Epidendrum minutum. Aubl. 2. 824.*

*Cranichis luteola. Swartz Fl. Ind. Occ. 3. 1433.*

*Epidendrum parviflorum. Pavon. in Herb. Lambert.*

*Dendrobium polystachyon. Swartz act. Holm. 1800. p. 247. Willd. no. 21. Thouars orch.*

*Afr. t. 85. Lindl. Coll. Bot. t. A. Rich. orch. Maur. 59.*

*Polystachya luteola. Hooker Exot. Fl. t. 103. Spreng. l. c.*

*Polystachya Mauritanica. Spreng. syst. 3. 742.*

Hab. in *Mexico, Pavon*; insulis *Caribæis, Swartz*; *Mauritio, Thouars*; *Zeylona, Macrae. (habeo s. sp. et v. v. cult.)*

*Variat floribus luteo-viridibus (occidentalis) et luteo-purpureis (orientalis).*

2. *POLYSTACHYA puberula. Lindley.*

*P. spicâ paniculatâ thyrsiformi, foliis lanceolatis septem-nerviis scapo longioribus, floribus ovariisque pubescentibus, pseudo-bulbis ovatis. Lindley in Bot. Reg. t. 851.*

Hab. in *Sierra Leone. (v. v. cult.)*

3. *POLYSTACHYA affinis.*

*P. spicâ simplici cylindraceâ, foliis ovalibus versus basin attenuatis 9-nerviis scapi longitudine, floribus ovariisque pilosis, pseudo-bulbis glabris depressis.*

Hab. in *Sierra Leone. (habeo s. sp. ex Herb. Hort. Soc.)*

An *P. puberulæ* varietas?

4. *POLYSTACHYA fusiformis. Lindley.*

*P. caulibus articulatis fusiformibus carnosis, foliis lineari-oblongis obliquè emarginatis, paniculis terminalibus foliis brevioribus, floribus glabris.*

*Dendrobium fusiforme. Thouars orch. Afr. t. 86.*

*Polystachya fusiformis. Lindley in Bot. Reg. p. 851.*

Hab. in *Borbonia, Thouars.*

I refer this and the succeeding to *Polystachya* chiefly on account of their habit. It is however by no means clear to me what they really are. M. Du Petit Thouars figures 2 pollen masses, in this, and he, and M. Ach. Richard both find two in *P. cultrata*. There is also some peculiarity in the attachment of the pollen masses to the stigma which requires more investigation.

5. *POLYSTACHYA cultrata. Lindley.*

*P. spicâ compositâ pauciflorâ, folio solitario basi auriculato oblongo cultriformi, floribus ovariisque glabris.*

*Dendrobium cultriforme; Thouars orch. Afr. t. 87. Ach. Rich. orch. Maur. 59.*

*Polystachya cultrata. Lindley in Bot. Reg. 851.*

Hab. in *Mauritio, Thouars.*

Pollinia 2, ex *Thouars* et *Ach. Rich.*

## XLVI. METACHILUM.

Sepala conniventia subæquilonga : lateralibus cum basi elongata columnæ connatis. Petala nana. Labellum ventricosum, integrum, cum margine pedis columnæ connatum, intus appendiculatum. Columna stigmatè prominente apice membranaceo bilobo. Anthera bilocularis, dorsalis. Pollen ignotum.—Herbæ epiphytæ, caulibus pendulis teretibus distichè foliosis. Flores parvi, laterales et terminales, spicati, capsulis reflexis.

A very remarkable genus nearly related to *Dendrobium* with which it agrees in habit, but from which the cohesion of the labellum with the margin of the column sufficiently distinguishes it. Its pollen is unknown.

1. *METACHILUM cyathiferum*. Lindl. in Wall. Cat. no. 2022.

Hab. ad Singapore, Wallich. (hab. s. sp. e Museo Anglo-Indico.)

*Caulis* penduli. *Folia* lineari-oblonga, apice obliquè emarginata, disticha; *vaginæ* laxæ. *Sepala* lateralia carinata. *Appendix disci labelli* cyathiformis.

## XLVII. DENDROBIUM.

*Dendrobium*. Swartz nov. act. Ups. 6. p. 82. t. 5. f. 5. Brown Prodr. 1. 332.—*Onychium*. Blume Bijdr. p. 323. t. 10.—*Pedilonum*. Ib. p. 320. t. 36.—*Sarcostoma*. Ib. p. 339. t. 45.—*Desmotrichum*. Ib. p. 329. t. 35.—*Grastidium*. Ib. p. 333.—*Ceraia*. Loureiro Fl. Cochinch. p. 518.

*Sepala* membranacea, erecta v. patentia, lateralibus majoribus obliquis cum basi producta columnæ connatis. *Petala* sepalo supremo sæpiùs majora, nunc minora, semper membranacea. *Labellum* cum pede columnæ articulatum v. connatum, semper sessile, indivisum v. trilobum, sæpiùs membranaceum, nunc appendiculatum. *Columna* semiteres, basi longè producta. *Anthera* bilocularis. *Pollinia* 4, per paria collateralia.—*Herbæ* epiphytæ, nunc caulescentes, nunc rhizomate repente pseudo-bulbifero. *Folia* plana, sæpiùs venosa. *Flores* solitarii fasciculati, v. racemosi, speciosi.

The most genuine form of *Dendrobium* is no doubt that of having caulescent stems with fascicles or racemes of membranous coloured flowers; but there are insensible gradations from this into rhizomata having false-bulbs, and there are also species in which the flowers are by no means conspicuous and rather fleshy. From *Bolbophyllum* it is distinguished readily by its lip being always sessile, never unguiculate as in that genus, and also in the texture of the same part being almost always of nearly the same consistence as the sepals, while in *Bolbophyllum* it is always remarkably fleshy.

It appears to me that Blume's genera which I have here reduced to *Dendrobium*, have no characters to distinguish them; unless *Sarcostema* be kept apart on account of a slight peculiarity in its pollen masses the nature of which however I do not well understand.

§ I. *Rhizoma pseudo-bulbos gerens apice foliosos. Bolbophyllis proxima.*

1. *DENDROBIUM amplum*. Lindl. in Wall. Cat. no. 2001.

*D.* rhizomate repente squamoso pseudo-bulbos ovatos squamosos diphyllus gerente, foliis ovato-oblongis emarginatis petiolatis, floribus solitariis longipedunculatis axillaribus e bracteis duabus oblongis petaloideis pro-

venientibus, sepalis ovatis acuminatis obtusis petalis angustioribus, labello sessili trilobo medio lamellato: lobis lateralibus abbreviatis rotundatis, intermedio ovato crenulato acuto.

Hab. in *Pundua* et *Napalia*, *Wallich.* (hab. s. *sp. defloratum* e *Museo Anglo-Indico*, et v. ic. *pict.*)

Flores straminei, intus guttati, expansi 3 uncias lati: labellum cum basi dilatata columnæ articulatam, lamellis tribus in medio, quarum intermedia abbreviata; lobo intermedio atropurpureo. Ovarium ferè tres uncias longum, bractea ad basin solitaria ovata. Pedunculus vix unciam excedens bracteis 2 magnis foliaceis albis ex basi ortis tectus.

This beautiful species approaches nearer to the genus *Bolbophyllum* than any with which I am acquainted. Its flowers are not exactly those of *Dendrobium*, the labellum being shaped differently from what is usual in that genus. It is however comprehended within the definition I have given of it, and will by no means enter *Bolbophyllum* with which it is its habit chiefly that accords.

2. *DENDROBIUM muscicola.* *Lindl. l. c. no. 2017.*

D. pseudo-bulbis rotundis cæspitosis induviatis, foliis binis petiolatis linearilanceolatis v. sessilibus ovatis apice subemarginatis uncinatis, racemis terminalibus erectis 3-4-floris foliis longioribus, bracteis cuspidatis florum longitudine, sepalis petalisque æqualibus membranaceis linearibus acuminatis conniventibus, labello lanceolato obtuso integerrimo.

? *Dendrobium demissum.* *Don Prodr. 34.*

Hab. in *Napalia*, *Wallich.* (hab. s. *sp. comm. cel. A. B. Lambert.*)

Planta pusilla 3 uncias vix excedens. Pseudo-bulbi parvi, rhizomate inconspicuo. Folia primordialia ovata subsessilia; terminalia persistentia linearilanceolata petiolata. Bractee oblonge cuspidate membranaceo marginatæ. Labellum sessile.

3. *DENDROBIUM Macraei.*

D. caulibus flexuosis moniliformibus pendulis pseudo-bulbos turbinatos monophyllos gerentibus, foliis oblongis obtusis sessilibus, floribus 2-3 axillaribus fasciculatis subsessilibus, sepalis petalisque subæqualibus ovatis acutis, labello trilobo: lobo medio crenato plicato marginibus recurvis.

Hab. in *Zeylona* supra arbores in sylvis agri Peradeniæ, florens Augusto, *Macrae.* (hab. s. *sp. defloratum*, et v. ic. *pict.*)

Caules longi articulis brevibus Sertulariæ ad instar. Pseudo-bulbi lutei teretes apice virides, fusco-striati. Flores albi, versus unguem labelli paululum lutescentes.

This curious species has the habit of the next division, but is covered with clavate spurious bulbs, from the apex of which springs a solitary oblong leaf, producing from its axilla 2 or 3 snow-white flowers. I only know the latter from Mr. Macrae's drawings.

4. *DENDROBIUM braccatum.*

D. pseudo-bulbis sphaericis cæspitosis depressis diphyllis, foliis ovatis submembranaceis, floribus solitariis foliis brevioribus, bractea magnâ petaloideâ ovato-subrotundâ ad basin ovarii brevissimi, sepalis petalis labelloque ovalibus obtusis subæqualibus.



Hab. in *Zeylona* supra saxa cæspites densos formans, florens Novembri, *Macrae*. (*hab. s. sp. et v. ic. pict. alabastra tantum juniora examinavi.*)

Herba pusilla 2-3-uncialis. Pseudo-bulbi fuliginosi lineis ab apice ad basin radiantibus notati, ovato-subrotundi, depressi. Flores albi. Bractea sanguineo-lineata. Labellum basi luteum lineis tribus sanguineis. Sepala lateralibus basi lutea venâ unicâ sanguineâ.

A beautiful little species, of which my description is chiefly taken from a drawing communicated by Mr. Macrae; the specimens I received from him having been unfortunately in young bud only. The great petaloid bractea at the base of the very short ovary characterizes the species distinctly.

5. *DENDROBIUM angulatum*.

D. "bulbis (monophyllis) angulatis, foliis ovali-lanceolatis subemarginatis, floribus subsolitariis, labelli limbo dilatato setaceo-multifido." *Blume p. 329. t. 35. sub Desmotricho.*

Hab. in sylvis altioribus montis Salak, *Javæ*, florens Augusto Octobri; *Blume*.

6. *DENDROBIUM fimbriatum*.

D. "bulbis (monophyllis) ovali-oblongis compressis, foliis oblongo-lanceolatis obtusiusculis, floribus subsolitariis, labelli limbo dilatato bifido plicato." *Blume p. 329. sub Desmotricho.*

Hab. in sylvis humilioribus provinciarum occidentalium *Javæ*, florens Junio Septembri; *Blume*.

*Variet* in sylvis Nusæ Kambangæ insulæ foliis latioribus, florens Novembri; *Blume*.

7. *DENDROBIUM comatum*.

D. "bulbis (monophyllis) oblongis compressiusculis, foliis oblongo-lanceolatis emarginatis, floribus fasciculatis, labelli limbo comato." *Blume p. 330. sub Desmotricho.*

Hab. in montanis circa Buitenzorg, *Javæ*, florens Septembri; *Blume*.

8. *DENDROBIUM appendiculatum*.

D. "bulbis (monophyllis) linearibus compressis, foliis oblongo-lanceolatis obtusiusculis, floribus fasciculatis, labelli limbo crispato appendiculo bifido instructo." *Blume p. 330. sub Desmotricho.*

Hab. ad montem Pantjar, *Javæ*, florens Junio Augusto; *Blume*.

9. *DENDROBIUM angustifolium*.

D. "bulbis (monophyllis) oblongis pedicellatis, foliis lineari-lanceolatis retusis, floribus solitariis, labello intus discoideo-lineato, limbi lobo medio bifido." *Blume p. 330. sub Desmotricho.*

Hab. in sylvis montis Salak, *Javæ*, florens Augusto; *Blume*.

Flores flavi. *Bl.*

10. *DENDROBIUM convexum*.

D. "bulbis (monophyllis) ovalibus, foliis ovali-lanceolatis emarginatis supra convexis infra concavis floribus solitariis, limbi lobo medio bifido." *Blume p. 331. sub Desmotricho.*

Hab. in arbores ad pedem montis Salak, *Javæ*, florens Januario; *Blume*.

11. *DENDROBIUM grandiflorum*.

D. "bulbis (monophyllis) ovalibus, foliis ovalibus emarginatis planis, floribus solitariis, labello intus 3-cristato, limbi lobo medio bilobo undulato." *Blume p. 331. sub Desmotricho.*

Hab. ad montem Salak prope Passir, *Javæ*, florens Julio Augusto; *Blume*.

12. *DENDROBIUM pusillum*.

D. "bulbis (diphyllis) pedicellatis oblongis, foliis ovali-lanceolatis oblique retusis, floribus solitariis, labelli limbo undulato." *Blume p. 331. t. 35. sub Desmotricho.*

Hab. ad littora Nusæ Kambangæ insulæ *Javæ*, florens Octobri Novembri; *Blume*.

13. *DENDROBIUM triflorum*.

D. "bulbis (diphyllis) ovatis compressis senioribus tetragonis, foliis ovali-lanceolatis oblique retusis, racemo subtrifloro, labelli limbo ovato." *Blume p. 331. sub Desmotricho.*

Hab. in sylvis Salak, *Javæ*, florens Junio; *Blume*.

14. *DENDROBIUM Cymbidioïdes*.

D. "bulbis (diphyllis) ovato-globosis pentagonis sub-2-phyllis, foliis lanceolatis retusis, racemo 3-7-floro, labello intus abruptè calloso-lineato, limbi lobo medio ovato-tumido." *Blume p. 332. sub Desmotricho.*

Hab. in sylvis altioribus montium Gede et Salak, *Javæ*, florens Aprili Augusto; *Blume*.

"Sepala lineari-oblonga, obtusa, patentia, pallidè flavescentia; labellum superne utrinque lineis purpurascens et maculâ sulphuræâ notatum. Variat bulbis confertis et remotis, ut etiam longitudine foliorum." *Blume*.

15. *DENDROBIUM elongatum*.

D. "bulbis (diphyllis) oblongis quadrangularibus 2-phyllis, foliis lanceolatis retusis, racemo elongato multifloro, labello intus membranaceo-lineato, limbi lobis obtusis." *Blume p. 332. sub Desmotricho.*

Hab. in sylvis altioribus montium Gede et Salak, *Javæ*, florens Julio Augusto; *Blume*.

"Sepala lineari-acuminata, erecto-patentia, flavescentia; labelli limbus semi-trilobus." *Blume*.

16. *DENDROBIUM geminatum*.

D. "bulbis (diphyllis) oblongis compressis subtetragonis 2-phyllis, foliis lanceolatis retusis, racemis subgeminatis paucifloris, labello intus lineolato, limbi lobo medio ovato acuto." *Blume p. 332. sub Desmotricho.*

Hab. in sylvis altioribus montium Gede et Salak, *Javæ*, florens Augusto; *Blume*.

"Sepala acuminata, flavescentia; labellum versus basin purpurascens, limbo sulphureo." *Bl.*

§ II. *Caules undique foliosi, cylindracei, sæpe penduli.*

17. *DENDROBIUM aureum*.

D. caulibus teretibus pendulis, internodiis abbreviatis, foliis lineari-oblongis apice obliquis emarginatis, floribus geminatis, sepalis ovatis

obtusis, petalis undulatis obtusis sepalis majoribus, labello cucullato : limbo ovato obtuso undulato integerrimo intus pubescente.

Hab. in *Zeylona*, supra arbores, in montem Nuera Ellia, florens Januario, *Macrae*. (hab. s. sp. et ic. pict.)

Flores magni, aurei, ex *Macrae* odoratissimi. Labellum disco aurantiaco.

18. *DENDROBIUM biflorum*. Swartz.

D. caule tereti simplici, foliis lineari-lanceolatis acuminatis planis, pedunculis bifloris lateralibus e paleis erumpentibus, labello trifido acuminato.

*Epidendrum biflorum*. Forst. ! Prodr. n. 318.

*Dendrobium biflorum*. Swartz. act. Holm. 1800. p. 246. Willd. no. 17.

Hab. in *Societatis insulis*, *Forster*; *Nav. Cook*. (v. iconem *Forsterianam* in *Bibliotheca Banksiana*, et s. sp. sine floribus in *Herb. Banksiano*.)

Obs. Flores e paleis corneis ex internodiis provenientibus erumpunt.

19. *DENDROBIUM macrostachyum*.

D. caulibus teretibus pendulis flagelliformibus, foliis ovato-lanceolatis submembranaceis, floribus ternatis racemum spurium formantibus, sepalis ovatis acutis, petalis lanceolatis sepalo supremo subæqualibus, labello cucullato venoso : limbo ovato obtuso ciliato intus pubescente.

Hab. supra arbores *Zeylonæ*, florens Julio, *Macrae*. (hab. s. sp. et ic. pict.)

Flores virescentes quam D. cucullati multò minores. Sepala et petala apice violacea. Labellum apice viride, venis roseis pulcherrimè pictum.

From a dried specimen of this species communicated to me by Mr. *Macrae* I picked a small living shoot, which has since sprouted forth in the Garden of the Horticultural Society where it is now growing.

20. *DENDROBIUM heterocarpum*. Wall.

D. caulibus teretibus pendulis, foliis oblongis acutis planis, floribus geminatis odoratis racemum spurium formantibus, sepalis lineari-oblongis acutis, petalis ovatis acutis sepalo supremo majoribus, labello unguiculato, limbo subpanduriformi holosericeo medio elongato acuminato plano.

Hab. in *Napalia*, *Wallich*. (v. ic. pict. in *Museo Anglo-Indico*.)

Flores dilutissimè flavescentes, fragrantissimi (ex cl. *Wallich*). Labellum luteum intus rubro obscuro pictum. Capsulæ ex *Wallich* carnosæ, incrassatæ, subclavatæ, angulis crassissimis bilobis.

Very near D. cucullatum from which it is distinguished by its pale yellow fragrant flowers, and the form of the labellum.

21. *DENDROBIUM amœnum*. Wall.

D. caulibus pendulis gracilibus nebulosis floriferis aphyllis, foliis lanceolatis acutis, floribus geminatis racemum spurium formantibus longè pedunculatis divaricatis, sepalis oblongis obtusis, petalis obtusis sepalo supremo paulò majoribus, labelli cucullati limbo ovato obtuso crenulato leviter ciliato : disco villosa.

? *Dendrobium aphyllum*. Rosb. Mm.

Hab. supra arbores in *Napalia*, florens Aprili Maio, *Wallich*. (v. ic. pict. in *Museo Anglo-Indico*.)

Planta florifera omninò aphylla, caulibus gracilibus nebulosis dignoscenda. Flores albi maculâ parvâ violaceâ ad apicem cujusvis segmenti. Labellum intus versus basin viridi-luteum.

This lovely species is abundantly distinguished by its slender stems, leafless, and clouded with dusky brown when in blossom; and also by its delicate white flowers, the tips of whose segments are remarkably blunt and tinged with delicate violet.

Dr. Wallich remarks in his *Mss.* that its fragrance is exquisite, not unlike that of *Olea fragrans*.

22. *DENDROBIUM* Pierardi. *Roxb.*

*D. caulibus pendulis glabris, foliis ovato-lanceolatis acutis, floribus geminatis racemum spurium formantibus, sepalis acuminatis membranaceis, petalis sepalo supremo majoribus acuminatis, labello cucullato dilatato subtruncato pubescente ciliato.*

*Dendrobium cucullatum.* *R. Brown in Bot. Reg. t. 548.*

*Dendrobium Pierardi.* *Roxb. Hort. Beng. Hooker Exotic Flora t. 9. Wall. Cat. no. 2007.*

Hab. in *India Orientali* calidiore, præsertim circa Chittagong et ad ostia Gangis, sæpiùs *Mangiferæ* adnascens, *Roxb. Mss. (hab. s. e Museo Anglo-Indico, et v. v. cult.)*

Flores diaphani, dilutè rosei, inodori. Labellum luteum, basi rubens, callo transverso supra unguem, lateribus purpureo-venosis.

The flowers vary in size according to the health of the individual; they also are occasionally seen with the sepals and petals more acuminate than usual. A variety with stems spotted with purple is known in our hot houses.

There can be no doubt that the plant figured in the *Exotic Flora* as *D. Pierardi*, that cultivated in the Botanic Garden at Calcutta under the same name, and the *D. cucullatum* of the Botanical Register, are all one and the same species. The latter exhibits *D. Pierardi* in the state in which it commonly appears in our stoves; but whether the flowers appear among the leaves, or occupy the old leafless stems, depends not upon any specific difference, but upon the state of health of particular individuals.

Dr. Roxburgh says that the leaves of his *D. Pierardi* are emarginate and the flowers yellow. It is not impossible that he has confounded *D. Pierardi*, *D. transparens* and *D. heterocapum*, all which, although slightly different, are undoubtedly distinct.

23. *DENDROBIUM* transparens. *Wallich. Cat. no. 2008.*

*D. caulibus pendulis teretibus, foliis ovato-lanceolatis acuminatis apice obliquis, floribus geminatis, sepalis acuminatis, petalis obtusis sepalo supremo majoribus, labello oblongo undulato ciliolato obtuso intùs levis-simè pubescente.*

Hab. in *Napalia*, *Wallich. (hab. s. sp. e Museo Anglo-Indico.)*

Flores dilutè rosei, labello concolore.

Very like *D. Pierardi*, from which it is distinguished by its leaves being longer and emarginate at the apex, by the petals being obtuse and the labellum much less hairy, and pink not yellow. The stems are also far shorter.

24. *DENDROBIUM* nobile.

*D. caulibus teretibus pendulis, foliis oblongis obliquè emarginatis obtusis, floribus geminatis, sepalis ovalibus, petalis conformibus majoribus, labello subrotundo cucullato cordato.*

Hab. in China, Reeves. (v. ic. pict. sinens. in Bibl. Hort. Soc.)

Flores maximi, speciosissimi, carnosi, albi, ad basin extûs virescentes, apice purpurei. Labellum apice purpureum, basi intensè sanguineum. Anthera purpurea.

25. *DENDROBIUM chrysanthum*. Wall. Cat. no. 2012.

D. caulibus teretibus pendulis, foliis contortis ovato-lanceolatis acuminatis, floribus ternatis inter folia nascentibus, sepalis carnosis oblongis obtusis: venis extûs tuberculatis, petalis obovatis retusis carnosis sepalo supremo latioribus, labello cucullato denticulato retuso obsolete trilobo.

*Dendrobium chrysanthum*. Bot. Reg. 1299.

Hab. in Napalia, Wallich. (hab. s. sp. e Museo Anglo-Indico, et v. v. cult.)

Flores intensè lutei carnosi, extûs tuberculis crebris muniti; petala tamen minus tuberculata. Labellum intûs maculâ atosanguineâ.

26. *DENDROBIUM longicornu*. Lindl. in Wall. Cat. no. 1997.

D. caulibus erectis hispidis flexuosis, foliis ovato-lanceolatis apice valdè obliquis, floribus fasciculatis v. solitariis terminalibus, bracteis ovatis acuminatis hispidis pedicello multò brevioribus, sepalis lateralibus in calcare longo acuminato connatis, petalis sepalo supremo conformibus, labello infundibulari cucullato integro dentato basi cum pede columnæ accreto. Lindley in Bot. Reg. fol. 1315.

Hab. in Sylhet et Napalia, Wallich. (hab. s. sp. e Museo Anglo-Indico, et v. v. cult.)

Caules erecti, pedales sesquipedalesve. Flores albi,  $1\frac{1}{2}$  unciam, ab apice columnæ ad apicem sepali supremi, longi. Labellum luteum extûs album, intûs lineâ axili venisque multis croceis. Columna brevis, semiteres, basi longissimè producta; clinandrium dente postico acuto, lateribus elevatis dentatis. Anthera subrotunda, anticè lanuginosa.

This remarkable species would be referable to Dr. Blume's *Pedilonum* if that genus were adopted. It has flowered in the Garden of the Horticultural Society, where I examined it. The structure of its stigma is highly curious, and unlike that of any other Orchideous plant with which I am acquainted. That part which Richard calls the rostellum, and through which impregnation takes effect is a two-lipped process, the lower lip of which is thick and abruptly truncate, the upper thinner, very irritable, inflected when the pollen is humid, but curving back with considerable elasticity if afterwards touched. The whole of the orifice of the stigmatic canal is choked up with a thick mucus.

I am not sure that this remarkable œconomy is not sufficient to constitute a particular genus; but I am unwilling to make use of it, especially as it is an obscure character, unless it shall be found that a similar structure exists in other species which can be combined with it.

27. *DENDROBIUM Sarcostoma*.

D. foliis linearibus subcarnosis basi vaginantibus, floribus terminalibus subsolitariis.

*Sarcostoma javanica*. Blume p. 340. t. 45.

Hab. in sylvis opacis montis Salak, Java, florens Julio Septembri; Blume. "Herba parasitica, pusilla, subcaulescens. Folia pauca linearia, basi vaginantia, subcarnosa. Flores è paleis erumpentes, terminales, subso-

litaria. Labellum unguiculatum, supernè latius, concavum, gynostemio incumbens; limbus subtrilobus, lobo medio carnosus. Gynostemium (columna) supernè incrassatum, anticè ad apicem rostello brevi instructum. Anthera cristata, bilocularis. Massæ pollinis 4, obovatæ, per paria elasticè cohærentes. *Blume.*

28. *DENDROBIUM gemellum.*

D. "foliis membranaceis lanceolatis acuminatis, pedunculis oppositifoliis subbifloris, limbo labelli acuminato." *Blume.*

*Pedilium biflorum. Blume p. 322.*

Hab. locis humidis umbrosis montis Salak, *Javæ*, florens Maio; *Blume.*

Floris emarctidi fabricam accuratè explorare non potuit indefessus *Blume.*

29. *DENDROBIUM secundum. Wallich. Cat. no. 1996.*

D. caulibus pendulis, foliis oblongis apice obliquè retusis, racemis lateralibus terminalibusque secundis, sepalis ovatis: lateralibus basi in cornu longum obtusum incurvum connatis, petalis supremo paulò minoribus, labello integerrimo acuto apice tumido. *Lindl. in Bot. Reg. t. 1291.*

*Pedilium secundum. Blume p. 322.*

Hab. in *Freti Malaccensis* insula, *Wallich*; circa *Tjikao* in montosis *Javæ*, florens Junio Julio, *Blume*; etiam in *Sumatra*. (v. v. cult. e *Sumatra alatum*: hab. s. sp. e *Museo Anglo-Indico*; et v. ic. pict. *Wallichian.*)

Flores amœni purpurei, *Fumariæ* cujusdam facie, concolores, labelli apice aurantiaco. Pollen purpureum!

30. *DENDROBIUM formosum. Roxb.*

D. caulibus teretibus pendulis pilosis, foliis distichis ovatis apice obliquè emarginatis obtusis, racemo brevi terminali 4-5-floro, bracteis brevibus ovatis, (floribus maximis), sepalis oblongis acutis: lateralibus basi longè productis, petalis duplò latioribus acutis, labello obovato dilatato retuso cum basi columnæ in calcar obtusum connato. *Lindley in Wall. Pl. As. Rar. no. 39.*

*Dendrobium formosum. Roxb. Mus. Wall. Cat. no. 1998.*

Hab. in *Silhet*, *Napalia*, et *Martabania*, *Wallich*. (hab. s. sp. e *Museo Anglo-Ind.*)

31. *DENDROBIUM polyanthum. Wall. Cat. no. 2009.*

D. caulibus teretibus pendulis, foliis oblongo-lanceolatis apice integris, racemis 3-4-floris lateralibus foliis brevioribus, sepalis lanceolatis: lateralibus supremo subæqualibus, petalis majoribus oblongis undulatis obtusis, labello obovato cucullato ciliato, capsulis fusiformibus.

Hab. in *Moolmayne*, *Indiæ Orientalis*, *Wallich*. (habeo s. sp. e *Museo Anglo-Indico floribus delapsis.*)

Capsulæ teretes, angulis nullis, floribus non coronatæ.

32. *DENDROBIUM bifarium. Wall. Cat. no. 2002.*

D. caulibus teretibus pendulis, foliis bifariis oblongis sessilibus nitidis apice bilobis obliquis, racemis subterminalibus brevibus multifloris, bracteis ovatis reflexis .....

*Angræcum purpureum primum. Rumphius 6. t. 49. f. 2.*

Hab. in *Penang*, *Wallich*. (hab. s. sp. *defloratum* e *Museo Anglo-Indico.*)

June, 1830.

**Flores non vidi.** Capsulæ ovales 6-costatæ, pisi magnitudine.

The habit of this species is so peculiar that it is not likely to be confounded with any other species. Its flowers have not been seen. The leaves of my dried specimens are glossy and beautifully marked with the longitudinal and transverse veins. The stems are as much as two feet long, while the leaves are only  $1\frac{1}{4}$  inch long and  $\frac{1}{4}$  inch broad.

33. *DENDROBIUM vestitum.* Wall. Cat. no. 2005.

D. caulibus pendulis villis deciduis densè vestitis, foliis coriaceis lanceolatis apice obliquis obtusis integris suprâ sparsè subtùs densissimè villosis, racemis elongatis multifloris flexuosis bracteis ovatis coriaceis persistentibus floribus capsulisque villosis, sepalis lateralibus in cornu obtuso porrecto connatis, petalis sepalo superiore minoribus.

Hab. ad Singapore, Wallich. (habeo s. sp. defloratum e Museo Anglo-Indico.)

Species valdè singularis, superficie villosissimâ ab omnibus distincta. Florum ad apicem capsularum vestigia emarcida mutila tantum vidi. Folia adulta 6 uncias longa.

34. *DENDROBIUM ramosum.* Lindl. l. c. no. 2003.

D. caulibus pendulis gracilibus ramosis glabris, foliis lanceolatis acuminatis apice integerrimis, floribus subracemosis, bracteis membranaceis reflexis obtusis, sepalis lateralibus magnis in cornu elongatum rectum connatis, petalis minoribus, labello cucullato acuto crispo.

Hab. in montibus Pundua, Wallich. (habeo s. sp. e Museo Anglo-Indico.)

Flores malè conservatos et mutilos tantum vidi. Species D. Pierardi affinis, distincta tamen habitu ramoso magis gracili, floribusque subracemosis nec geminis ternisve. Formam labelli et petalorum haud licuit detegere.

35. *DENDROBIUM pulchellum.* Roxb.

D. caulibus teretibus pendulis, foliis oblongo-lanceolatis subplicatis, racemis lateralibus strictis multifloris, bracteis brevibus ovatis obtusis, sepalis ovatis acuminatis subcostatis, petalis oblongis obtusis tenuioribus et latioribus, labello unguiculato cochleariformi obtusissimo ciliato petalis brevioribus.

*Dendrobium pulchellum.* Roxb. Mss.

Hab. supra arbores et saxa in sylvis Sylhet, florens Maio Junio, Roxb. Mss. (v. ic. pict.)

Sepala albida. Petala rosea. Labellum lutescens maculâ basi rubro-aurantiacâ.

36. *DENDROBIUM moschatum.* Wall.

D. caulibus teretibus pendulis, foliis . . . . ., racemis lateralibus laxis 6-floris, bracteis brevibus oblongis obtusis, sepalis oblongis obtusis patentissimis petalisque oblongis retusis latioribus obsolete tessellatis, labello unguiculato cochleariformi obtusissimo extùs villosio.

*Dendrobium moschatum.* Wall. Mss. Don Prodr. 34.

*Epidendrum moschatum.* Hamilt. apud Symes. Emb. 3. 315. c. ic.

Hab. in Pegu, Wallich. (v. ic. pict. in Mus. Anglo-Indico.)

Flores speciosissimi diametro  $2\frac{1}{2}$ -3 unciarum, amœnè sed pallidè aurantiaci. Labellum extùs ejusdem coloris, intùs luteum basin versus utrinque maculis duabus amplis coccineis, venis quinque cristato-fimbriatis.

This superb species flowers without its leaves in the Botanic Garden at Calcutta, in May. The blossoms exhale a faint smell resembling that of Rhubarb, as I learn from Dr. Wallich's Mss.

37. † *DENDROBIUM Calceolaria*. Hooker.

*D. caulibus teretibus pendulis, foliis linearibus obtusis, racemis lateralibus laxis 5-floris, sepalis patentissimis petalisque oblongis obtusis latioribus venosis reticulatis, labello unguiculato cochleariformi obtusissimo margine abruptè inflexo pubescente.*

*Dendrobium Calceolaria*. Hooker. *Ex. Fl.* 184.

Hab. in *India Orientali*, Hooker.

Flores rosei, magnitudine *D. moschati*, versus columnam flavescentes. Labellum lutescens, intus maculis duabus amplis coccineis (venis nullis fimbriatis ex Hookero) ungue luteo. Columna et anthera atropurpureæ, anticè luteæ.

This species approaches very nearly to *Dendrobium moschatum*, with which however Dr. Hooker does not contrast it. It appears to differ in the characters I have pointed out, especially in the absence of the 5 crested veins that are found in the inside of the lip of *D. moschatum*, which Dr. Hooker would no doubt have both figured and described had they existed in his *D. Calceolaria*.

Upon referring to Dr. Wallich's Mss. I find that his *Dendrobium Calceolus* is the same as *D. moschatum*, and that he described it from Dr. Carey's Garden. It is therefore strongly to be suspected that this and *D. moschatum* are both the same.

38. *DENDROBIUM fimbriatum*. Wall. Mss.

*D. caulibus teretibus pendulis, foliis ovato-lanceolatis, racemis lateralibus multifloris, sepalis oblongis undulatis patentissimis, petalis majoribus undulatis ciliatis, labello indiviso cucullato rotundato fimbriato, fimbriis laceris.*

*Dendrobium fimbriatum*. Hooker. *Exot. Fl.* 71. Wall. Cat. no. 2011.

Hab. in *Napalia*, Wallich. (hab. s. sp. e Museo Anglo-Indico.)

Flores intensè aurei, in icone Hookeriano unicolores, salvis striis quibusdam versus basin aurantiacis; verosimiliter tamen basi sanguineo-maculati in spontanea planta.

This species has in some respects the appearance of *Dendrobium chrysanthum*, from which however it is distinguishable both by its inflorescence and by the different shape of its petals.

39. *DENDROBIUM auriferum*.

*D. caulibus teretibus pendulis, foliis oblongis obtusis integris, racemis lateralibus horizontalibus clavatis foliorum longitudine, bracteis cucullatis densè imbricatis, sepalis petalis labelloque lineari-lanceolatis conniventibus acuminatissimis.*

Hab. in *China*, Reeves. (v. ic. pict. sinens. in *Bibl. Hort. Soc.*)

Flores aurei. Bracteæ virides. Sepala lateralia basi parum dilatata.

40. *DENDROBIUM moniliforme*. Swartz.

*D. caulibus erectis ramosis, internodiis tumidis, foliis oblongis oblique emarginatis obtusis, floribus geminatis foliis longioribus, sepalis petalis-*



que oblongis acutis venosis, labello cucullato acuto conformi. *Lindl. in Bot. Reg. fol. 1314.*

*Fu Ran. Kämpf. aman. t. 865.*

*Epidendrum moniliforme. Linn. sp. pl. 1352.*

*Dendrobium moniliforme. Swartz act. Holm. 1800. p. 246. Willd. no. 19.*

*Hab. in Japoniæ rupibus et arboribus. (v. ic. pict. v. cult. e China allatum.)*

The *Epidendrum monile* of Thunberg, which that writer says has acute leaves and white flowers, is a distinct species. See *D. catenatum*.

#### 41. *DENDROBIUM catenatum.*

*D. caulibus teretibus erectis: internodiis tumidis, foliis lineari-lanceolatis acutis, racemis lateralibus 4-5-floris, sepalis petalisque lanceolatis acuminatis, labello oblongo tridentato.*

*Epidendrum monile. Thunb. Fl. Jap.*

*Hab. in Japonia, Thunberg; in China, Reeves. (v. ic. pict. sinens. in Bibl. Hort. Soc.)*

*Sepala viridia. Petala alba. Labellum disco fulvum sub apice tridentato purpureo-maculatum.*

#### 42. *DENDROBIUM denudans. Don.*

*D. caulibus brevibus cæspitosis erectis vaginis laxis foliorum vestitis, foliis oblongo-lanceolatis submembranaceis apice obliquis emarginatis, racemis lateralibus terminalibusque nutantibus multifloris, sepalis acuminatis: lateralibus basi incurvis, petalis minoribus, labelli trilobi lobo medio crenulato recurvo: lateralibus serratis.*

*Dendrobium denudans. Don. Prodr. 34. Wall. Cat. no. 2014.*

*Hab. in Napalia, Wallich. (hab. s. sp. e Museo Anglo-Indico, et v. ic. pict. Wall.)*

*Flores albi, virescentes. Labellum viride, concolor.*

This species is the most variable that I know in point of size. Some of Dr. Wallich's specimens are not more than an inch and half high, with two or three leaves and as many flowers on each individual, while others are six or seven inches high, with numerous distichous leaves, and three or four long nodding racemes, each consisting of eight or nine flowers. The species is always distinguishable by the loose membranous sheaths which clothe the stem when the leaves have fallen off.

#### 43. *DENDROBIUM cuspidatum. Lindl. in Wall. Cat. no. 2015.*

*D. caulibus brevibus erectis 3-5-phyllis, foliis lineari-oblongis apice obliquis emarginatis, racemis terminalibus 3-4-floris foliis brevioribus, bracteis lineari-ovatis acutis, petalis sepalisque lineari-lanceolatis acuminatis æqualibus: horum lateralibus basi incurvis cornu referentibus, labelli trilobi petalis duplò brevioris lobis lateralibus maximis erectis rotundatis integerrimis: intermedio ovato acuminato.*

*Hab. in Tavoy, Wallich. (hab. s. sp. Museo Anglo-Indico.)*

This species resembles in many respects *D. denudans*, from which it is abundantly distinguished by the loose sheaths of the fallen leaves not covering the stem, and by the peculiar form of the lip. My specimens are from 3 to 4 inches high. The flowers appear to be white.

#### 44. *DENDROBIUM barbatulum. Lindl. l. c. no. 2013.*

*D. caulibus teretibus . . . . ., foliis . . . . ., racemis lateralibus termi-*

nalibusque strictis multifloris, sepalis ovatis acuminatis, petalis obovatis acutis sepalo supremo majoribus, labello plano obovato obtuso apiculato integerrimo basi barbatulo.

Hab. in *India Orientali*, *Heyne*. (*hab. s. sp. e Museo Anglo-Indico*.)

Flores diaphani *D. macrostachyi* magnitudine.

Very nearly related to *D. pulchellum* from which it is distinguished by the much smaller size of the flowers, and the form of the labellum.

45. *DENDROBIUM pygmæum*. *Lindl. l. c. no. 1999*.

*D. caulibus erectis cæspitosis vaginis laxis foliorum vestitis, foliis lineari-lanceolatis, racemis suberectis terminalibus multifloris foliorum longitudine, rachi angulato, bracteis membranaceis acuminatis, sepalis inferioribus ovatis acuminatis ad basin cornu incurvo connatis: supremo petalisque lineari-spatulatis acutis, labello unguiculato cuneato integro: callis duobus longitudinalibus in disco; margine anteriore carnosio crispo plicato lobo intermedio ovato.*

? *Dendrobium pusillum*. *Don. Prodr. 35*.

Hab. ad *Prome, Martabanæ, Wallich*. (*hab. s. sp. e Museo Anglo-Indico*.)

Herba 2-3-pollicaris, verosimiliter cæspitosa. Pseudo-bulbi nulli. Racemi erecti v. cernui. *D. denudanti* affinis, sed labelli latera nullo modo serrata, et figura diversa.

46. *DENDROBIUM linguaeforme*. *Swartz*.

*D. caulibus teretibus repentibus, foliis sessilibus obovatis altè trisulcatis, racemis erectis multifloris, sepalis petalisque linearibus acuminatissimis, labelli abbreviati lobo medio undulato tricarinato.*

*Dendrobium linguaeforme*. *Swartz act. Holm. 1800. p. 247. Smith Exot. Bot. t. 11. Willd. n. 24. R. Brown Prodr. 333.*

Hab. in *insulis maris Pacifici; Nova Hollandia, Banks, R. Brown*. (*v. s. sp. in Herb. Banks*.)

Flores pallidè flavi. Labellum cristis luteis, lobis lateralibus cæruleis.

47. *DENDROBIUM rigidum*. *R. Brown*.

*D. "caulibus repentibus, foliis oblongo-lanceolatis acutis carnosis longitudine racemi pauciflori patuli, perianthii foliolis oblongis acutiusculis æquantibus labellum laminâ oblongâ obtusâ."* *Brown Prodr. 333.*

Hab. in *N. Hollandia tropica; R. Brown*.

48. *DENDROBIUM flavescens*.

*D. "ebulbe, foliis paucis lineari-lanceolatis obtusis basi canaliculatis, floribus alternis subspicatis terminalibus pubentibus, labello intus pubescente, limbo emarginato plicato."* *Blume*.

*Onychium flavescens. Blume p. 325.*

Hab. in montosis *Salak et Seribu, Java, florens Martio Octobri; Blume*. Flores parvi, flavi. *Bl.*

49. *DENDROBIUM nudum*.

*D. "foliis lineari-lanceolatis inæquali-acuminatis membranaceis, racemis paucifloris, sepalis interioribus lanceolatis dorsali angustioribus."* *Blume*.

*Onychium nudum. Blume p. 325.*

Hab. in altis montis *Salak, Java, florens Maio Junio; Blume*.

"Caules articulati, supernè flexuosi; flores dilutè purpurascences, demùm flavescences; labellum ad basin unguiculo præditum." *Bl.*

50. *DENDROBIUM mutabile.*

D. "foliis lineari-lanceolatis obtusis obliquè retusis membranaceis." *Blume.*

*Onychium mutabile. Blume p. 324.*

Hab. in montosis *Java*, florens Septembri Octobri; *Blume.*

Flores densè racemosi dilutè rosei, labello glandulis tribus sulphureis ornato. Gynostemium anticè pubescens. Petala sepalo supremo latiora. Labellum infernè unguiculo libero instructum. *Bl.*

51. *DENDROBIUM rigidum.*

D. "foliis lato-lanceolatis obliquè retusis rigidis." *Blume.*

*Onychium rigidum. Blume p. 324.*

Hab. in montosis *Java*, florens Septembri, &c. *Blume.*

"Flores albidii, labello glandulis tribus flavescens instructo; forsan varietas præcedentis (*D. mutabilis*) sed firmitate partium discrepat." *Bl.*

52. *DENDROBIUM erosum.*

D. "foliis subcoriaceis lanceolatis obtusis, racemis brevibus oppositifoliis subterminalibusve, sepalis obtusis, dorsali interioribus latiore, labelli limbo rotundato concavo eroso." *Blume.*

*Pedilonum erosum. Blume p. 323.*

Hab. in sylvis altioribus *Salak, Java*, florens Junio; *Blume.*

53. *DENDROBIUM hymenophyllum.*

D. "foliis membranaceis lanceolatis inæquali-acuminatis, pedicellis brevibus, sepalo dorsali interioribus obtusis æquali, sacco calcariformi longissimo, limbo labelli undulato." *Blume.*

*Pedilonum undulatum. Blume p. 322. t. 36.*

Hab. in sylvis *Salak, Java*, florens Junio; *Blume.*

Sepala purpurascens; labellum flavum. *Bl.*

54. *DENDROBIUM villosulum. Wall. Cat. no. 2006.*

D. caulibus flagelliformibus longissimis pube deciduâ hispidis, foliis ovato-lanceolatis apice obliquè bilobis rectis, floribus . . . . .

Hab. in *Penang, Wallich. (habeo s. sp. sine floribus e Museo Anglo-Indico.)*

Frustula tantum vidi. Species valdè distincta sed recognoscenda.

55. *DENDROBIUM acuminatissimum.*

D. "foliis membranaceis linearibus sepalisque acuminatissimis." *Blume.*

*Grastidium acuminatissimum. Blume p. 335.*

Hab. in convallibus montis *Salak supra arbores, Java*, florens Maio Junio; *Blume.*

Flores virescentes. *Bl.*

56. *DENDROBIUM salaccense.*

D. "foliis membranaceis lineari-lanceolatis obliquè retusis, sepalis acutis, labello obtuso intus 1-lineato." *Blume.*

*Grastidium salaccense.* *Blume p. 333.*

Hab. in sylvis altioribus montis Salak, *Javæ*, florens Augusto Decembri ; Blume.

Flores lutei. *Bl.*

57. *DENDROBIUM rugosum.*

D. "foliis subcoriaceis lanceolatis apice emarginatis, sepalis et labelli limbo acuminatis, labello intùs membranaceo-rugoso." *Blume.*

*Grastidium rugosum.* *Blume p. 333.*

Hab. in sylvis altioribus montis Salak, *Javæ*, florens Febuario ; Blume.

Flores flavi. *Bl.*

58. *DENDROBIUM Kuhlîi.*

D. "foliis submembranaceis lanceolatis apice inæquali-obtusis, sepalo dorsali interioribus lato-lanceolatis latiori, labelli limbo spatulato acuto." *Blume.*

*Pedilonum Kuhlîi.* *Blume p. 321.*

Hab. in montibus altioribus provinciarum occidentalium *Javæ*, florens Maio Julio ; Blume.

Flores pallidè purpurascens. *Bl.*

59. *DENDROBIUM Hasseltii.*

D. "foliis rigidis lanceolatis profundè obliquè emarginatis, sepalo dorsali interioribus lato-lanceolatis æquali, labelli limbo lineari-acuto." *Blume.*

*Pedilonum Hasseltii.* *Blume p. 321.*

Hab. ad montem Pangoerangoe ad truncos arborum, *Javæ*, florens Maio Junio ; Blume.

Flores profundè purpurascens. *Bl.*

60. *DENDROBIUM æmulum.* *R. Br.*

D. "caulibus erectis apice 2-3-phyllis, foliis ovali-oblongis integerrimis racemo terminali multifloro brevioribus, perianthii foliolis linearibus, labello infrà divisuram carinà triplici ; lobo intermedio semiovato acutiusculo unicarinato." *Brown.*

*Dendrobium æmulum.* *Br. Prodr. 333. Hooker in Bot. Mag. 2906.*

Hab. ad Portum Jackson, *Novæ Hollandiæ* ; R. Brown.

Flores ex icone Hookeriano albidì labello rubroguttato.

61. *DENDROBIUM speciosum.*

D. caulibus erectis, apice 2-3-phyllis, foliis ovali-oblongis integerrimis racemo terminali multifloro brevioribus, perianthii foliolis angustoblongis, labello infrà divisuram carinà unicà ; lobo intermedio latiore quam longo ecarinato." *Brown Prodr. 332.*

*Dendrobium speciosum.* *Esot. Bot. t. 10.*

Hab. in *Nova Hollandia tropica*, etiam ad Portum Jackson. (*v. s. sp.*)

62. *DENDROBIUM undulatum.* *R. Br.*

D. "foliis bifariis ovali-oblongis emarginatis, racemis oppositifoliis longissimis, labello intùs 5-carinato, lobo intermedio oblongo foliolisque interioribus perianthii undulatis." *Brown Prodr. 332.*

Hab. in *N. Holl. tropica*; *R. Brown*; Bustard's Bay, Bay of Inlets, Cape Grafton, &c. *Banks*. (*v. s. sp. in Herb. Banks. et habeo flores comm. a celeb. Brown.*)

NOTE. The figures of Rumphius

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belong to this section—but to species with which I am unacquainted.

§ III. *Caules undique foliosi, basi incrassati.*

63. *DENDROBIUM crumenatum.* Swartz.

*D. caulibus cæspitosis erectis basi incrassatis teretibus, foliis ovato-oblongis obtusis emarginatis, racemo terminali 3-5-floro, sepalis petalisque ovatis acuminatis subundulatis conformibus, labello cucullato undulato acuminato.*

*Angræcum crumenatum.* Rumph. 6. t. 47. f. 2.

*Dendrobium crumenatum.* Swartz. Willd. no. 20. Lindl. in Hort. Trans. 7. p. 70.

*Onychium crumenatum.* Blume p. 326.

Hab. supra arbores, *Javæ*, Blume; *Sumatræ*, Raffles; *Penang*, Wallich. (*v. v. cult.*)

Flores albi, odorati, apicibus roseis, labelli disco luteo.

Variat floribus albidis et lilaceis, etiam foliis ovalibus v. oblongis retusis crassioribus; *Bl.*

64. *DENDROBIUM angulatum.* Wall. Cat. no. 2010.

*D. caulibus gracilibus subramosis basi fusiformibus carnosis glaberrimis, foliis linearibus basi latioribus apice emarginatis obliquis, floribus e gemma paleacea exortis solitariis* .....

Hab. ad *Attran*, *Martabanæ*, Wallich. (*habeo s. sp. e Museo Anglo-Indico ferè defloratum.*)

Florem unicum mutilum tantum vidi, magnitudine et facie *Apori* ancipitis. Sepala lateralialia cæteris multò majora. Petala sepalo supremo verosimiliter paulò minora. Folia minora.

65. *DENDROBIUM Blumii.*

*D. "foliis lineari-lanceolatis obliquè retusis, floribus subterminalibus paleis cinctis, labello intùs disco supernè tricuspidato instructo, limbi lobo medio abbreviato fimbriato-bifido."* Blume.

*Onychium fimbriatum.* Blume p. 325.

Hab. in sylvis montis Pantjar, *Javæ*, florens Junio; Blume.

Caules compressi ad basin bulbo dilatato-tetragono instructi. *Bl.*

66. *DENDROBIUM tricuspe.*

*D. "foliis lineari-lanceolatis obtusiusculis, floribus terminalibus paleis cinctis, labello intùs disco supernè tricuspidato instructo, limbo lobo medio rotundato integerrimo."* Blume.

*Onychium tricuspe.* Blume p. 326.

Hab. ad arbores in sylvis montis Salak, *Javæ*, florens Octobri; Blume.

"Caules compressi, supra basin bulbo compresso instructi. Accedit præcedenti (*Onychio* suo fimbriato) cui differt limbo labelli integerrimo." *Bl.*

67. *DENDROBIUM lamellatum*.

D. "foliis lato-lanceolatis in bulbis compressis vaginantibus, pedunculis confertis paucifloris ex apice bulborum erumpentibus, labelli limbo undulato, ungue gynostemii appendice lamellato instructo." *Blume*.

*Oncidium lamellatum*. *Blume Bijl.* 326. t. 10.

Hab. prope Passir Ipis in Provincia Buitenzorg, *Javæ*, florens Junio Augusto; *Blume*.

68. *DENDROBIUM tetraedre*.

D. "foliis linearibus emarginatis membranaceis (parvis), floribus oppositifoliis alternis, labelli limbo undulato, caule tetraedri." *Blume*.

*Oncidium tetraedre*. *Blume p.* 327.

Hab. in sylvis altioribus montis Salak, *Javæ*, florens Junio; *Blume*.

"Planta parva; bulbi fusini. Flores albido-purpurascens, labello infernè unguiculo instructo, limbo semitrilobo." *Bl.*

69. *DENDROBIUM connatum*.

D. "foliis membranaceis ovali-oblongis, retusis, floribus oppositifoliis solitariis, labello infernè cum ungue gynostemii connato intùs verrucoso, limbo rotundato." *Blume*.

*Oncidium connatum*. *Blume p.* 328.

Hab. ad pedem montis Salak, *Javæ*, florens Septembri Octobri; *Blume*.

"Caules incrassati, quasi articulati, foliis bifariis verticalibus. Flores albido-virescentes." *Blume*.

70. *DENDROBIUM japonicum*.

D. "foliis lineari-lanceolatis obtusiusculis, floribus subterminalibus alternis, pedicellis basi incrassatis, labello intùs pubescente, limbo ovato acuto." *Blume*.

*Oncidium japonicum*. *Blume p.* 328.

Hab. in hortis *Javæ* ex *Japonia* allatum; *Blume*.

"Caules ebulbi sed supra basin incrassati, teretiusculi, articulati; flores liliacei, odorati; labellum basi ad marginem subciliatum, intùs pubescens, basi non appendiculatum; unguis gynostemii latus, concavus." *Blume*.

71. *DENDROBIUM Ceraia*.

*Ceraia simplicissima*. *Lour. Fl. Cochinch.* p. 518.

Hab. in sylvis *Cochinchinæ* et *Chinæ*, rupibus et arboribus inhærens, *Loureiro*. (v. s. sp. in *Herb. Banks.*)

In Herbario Banksiano adest exemplar ab ipso *Loureiro*, nomine *Keranthi insignitum*, quod procul dubio *Ceraia* ejus simplicissimæ pertinet. Unicum folium habet parvum lineare, sed flores nullos; esse autem *Dendrobium* quoddam *D. crumenato* valdè affine nihil dubito. Caules palmares basi tumidi fusiformes.

Note. The figures of Rumphius

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belong to this section, but to species with which I am unacquainted.

June, 1830.

N

§ IV. *Caules undique foliosi versus apicem sensim incrassati, unde clavati sunt.*

This section, and the preceding one also, represent the stem of *Dendrobium* passing towards the pseudo-bulbous state of *Bolbophyllum*.

72. *DENDROBIUM densiflorum.* Wall. Cat. no. 2000.

D. caulibus articulatis clavatis pendulis apice foliosis, foliis oblongis acutis nervosis, racemis lateralibus multifloris foliis longioribus: junioribus strobiliformibus, bracteis oblongis plicatis recurvis pedicellis longioribus, sepalis patentissimis ovatis obtusis, petalis conformibus majoribus, labello majore rhomboideo unguiculato serrulato retuso. Lindl. in Wall. Pl. As. Rar. no. 40.

*Epidendrum Dumunsuttu.* Buchan. in Herb. Smith.

Hab. in *Napalia*, Wallich. (hab. s. sp. *defloratum* e Museo Anglo-Indico, v. ic. pict. et s. sp. in Herb. Smith.)

73. *DENDROBIUM nutans.*

D. caulibus articulatis subclavatis hispidis apice foliosis, foliis ovato-lanceolatis apice valdè obliquè uncinato-bilobis, pedunculis subterminalibus bifloris foliis brevioribus, bracteis minimis, petalis sepalisque lineari-lanceolatis acuminatis æqualibus membranaceis, labello conformi carnoso crenulato indiviso, capsulis oblongis nutantibus.

Hab. in collibus Peradeniæ, *Zeylonæ*, supra arbores, florens Novembri, *Macrae*. (habeo s. sp. et vidi iconem pictam.)

Caules pedales v. sesquipedales, subflexuosi. Folia in genere parva, subtus minutissimè hispidiuscula. Flores albi, subvirescentes, labello luteo. Capsulæ oblongæ, angulis depressis, sterilibus vittæformibus marginatis.

74. *DENDROBIUM bicolor.*

D. caulibus erectis elongatis subclavatis apice foliosis, foliis lanceolatis acutis, racemo brevi erecto terminali v. subterminali 3-4-floro foliis multò brevioribus, bracteis oblongis obtusis petaloideis venosis, petalis sepalisque oblongis obtusis æqualibus, labello trilobo obtuso: lobis lateralibus erectis rotundatis.

Hab. in Monte Nuera Ellia, *Zeylonæ*, supra arbores crescens, Augusto florens, *Macrae*. (hab. s. sp. *defloratum*, et vidi iconem pict.)

Bracteæ magnæ oblongæ petaloideæ venosæ bicolores, apice virides basi fusco rubræ. Flores albid.

75. *DENDROBIUM Heyneanum.* Lindl. in Wall. Cat. no. 1995.

D. caulibus erectis flexuosis clavatis vaginis laxis foliorum vestitis, foliis lineari-lanceolatis acutis, racemis axillaribus patentissimis multifloris, bracteis minimis ovatis, sepalis petalisque ovato-lanceolatis acutis subæqualibus, labello trilobo cum basi columnæ connato, callo longitudinali in disco: lobis lateralibus acutis intermedio subrotundo carnoso inciso-crenato.

Hab. in *India Orientali*, *Heyne*. (hab. s. sp. e Museo Anglo-Indico.)

Racemi pedunculati multiflori patentissimi unà cum figura labelli speciem distinguunt.

§ V. *Folia teretia, subulata, v. semicylindracea.*76. *DENDROBIUM crispatum.* Swartz.

*D. caule ramoso virgato tereti, foliis cylindraceis filiformibus subincurvis, racemis lateralibus simplicibus, labelli lobo medio revoluti undulato crenato.*

*Epidendrum crispatum.* Forst. / *Prodr.* n. 315.

*Dendrobium crispatum.* Swartz. *act. Holm.* 1800. p. 247. Willd. n. 22.

Hab. in *Societatis insulis, Banks.* (v. iconem *Forsterianam* in *Bibliotheca Banksiana*, et s. sp. in *Herb. Banks.*)

Caulis articulatus, rigidus, lævigatus, graminis cujusdam ad instar. Folia teretia. Racemus terminalis.

77. *DENDROBIUM canaliculatum.* R. Brown.

*D. "caulibus erectis abbreviatis bulbiformibus apice subtriphylis, foliis semicylindraceis canaliculatis acutis carnosis, scapo terminali, racemo multifloro, perianthii foliolis oblongis, labelli lobis lateralibus oblongis; intermedio subrotundo acuto disco 3-lamelloso."* Brown *Prodr.* 333.

Hab. in *N. Hollandia tropica*; R. Brown.

78. *DENDROBIUM teretifolium.* R. Brown.

*D. "caulibus repentibus, foliis filiformibus teretibus, perianthii foliolis elongato-linearibus apice angustatis, labello tricarinato; lobo intermedio lineari-lanceolato acuminato crispato."* Brown *Prodr.* 333.

Hab. ad Portum Jackson, *N. Hollandiæ*; R. Brown.

79. *DENDROBIUM tenellum.*

*D. "foliis lineari-subulatis, floribus subterminalibus solitariis alternis, labelli limbo emarginato."* Blume.

*Onychium tenellum.* Blume p. 327.

Hab. in arboribus circa catarractas calidas ad montem Gede, *Javæ*, florens Maio; Blume.

"Bulbi ovales, sulcati; flores albidii, sepalis acutis; labellum intus striis purpurascens notatum." Bl.

80. *DENDROBIUM gracile.*

*D. "foliis lineari-subulatis, floribus alternis solitariis geminisve, labelli limbo obtuso."* Blume.

*Onychium gracile.* Blume p. 327.

Hab. in altioribus montis Gede, *Javæ*, florens Aprili; Blume.

"Bulbi ovales; flores nutantes, lilacini, sepalis obtusiusculis." Bl.

81. *DENDROBIUM subulatum.*

*D. "foliis subcarnosis subulatis teretibus, pedicellis alternis subspicatis terminalibus, labelli limbo undulato emarginato."* Blume.

*Onychium subulatum.* Blume p. 328.

Hab. locis humilioribus ad arbores *Javæ*, florens toto anno; Blume.

Caules ebulbi. Flores flavido-purpurascens. Bl.



\* *Species defectu exemplarium et ob descriptiones mancas valdè dubiæ—  
omnes recognoscendæ.*

82. ? *DENDROBIUM* carinatum. *Willd.*

*D. foliis oblongo-lanceolatis compressis articulatis, scapis ramosis. Willd.  
no. 7.*

*Bontia luzonica. Petiv. gazoph. t. 44. f. 10.*

*Epidendrum carinatum. Linn. sp. pl. 1350.*

*Hab. in insulis Luzonum.*

83. ? *DENDROBIUM* paniculatum. *Swartz.*

*D. "caule infernè vestito foliis oblongis obtusis emarginatis, supernè ancipiti-vaginato, spiculis filiformibus paniculatis contiguis." Swartz.*

*Dendrobium paniculatum. Swartz. Pers. syn. p. 523.*

*Hab. in Sierra Leone.*

84. ? *DENDROBIUM* roseum. *Swartz.*

*D. "caule aphylo erecto vaginis membranaceis ovato-lanceolatis vestito, racemo terminali, floribus deltoideo-conicis, labello spatulato crenulato." Swartz.*

*Dendrobium roseum. Swartz. Pers. syn. p. 523.*

*Hab. in Sierra Leone.*

This very difficult and extensive genus, stands still in great need of reformation: particularly in the arrangement of the species. I am acquainted with several more than are here mentioned, but I am unwilling to introduce them without better materials.

I cannot conclude my account of the tribe of Orchideous plants with waxy pollen-masses destitute of glands and other secreting apparatus, without adverting to the genus *Angræcum*. I adopted this genus, some years since, from M. Du Petit Thouars, and published it in my *Collectanea Botanica*, t. 15. referring to it a plant, *A. maculatum*, found equally in Brazil and on the West coast of Africa, and now very common in the hot-houses of England. I described the pollen masses of this plant as destitute of a gland, and my drawing was in conformity with that description. I subsequently examined an imperfect living specimen of a Sierra Leone plant which I believe to be the *Limodorum luridum* of Afzelius, and which is in all probability also an *Angræcum*, and I took the pollen masses to be as I had before seen them in my *Angr. maculatum*, that is to say destitute of a gland. In a memoir upon the Orchideous plants of the Mauritius and neighbouring islands, published in 1828, M. Achille Richard, who has examined specimens of several of Du Petit Thouars's *Angræcums*, expressly declares that in all these there is no gland, he says he has not seen *any thing like caudicula* (which is never found without a gland) in any one of them. Hence it would seem that no fact can be supported by more conclusive testimony than that *Angræcum* belongs to *Malaxidæ*; and yet this testimony I distrust so much that, without absolutely rejecting it, I cannot receive it; and for the following reasons. In the first place, I now know that my observation upon *A. maculatum* was incorrect; that plant has distinctly both a caudicula and gland; secondly, Du Petit Thouars in some cases, as t. 81. (*Æonia Auberti m.*) distinctly represents the pollen masses with glands, of which however M. Achille Richard denies the existence. Now in this case I prefer the evidence of M. Du Petit Thouars whose figure was taken from a fresh specimen. In the third place, M. Ach. Richard states that there is no gland in *Angræcum gladiifolium*; this happens to be the only Isle of France species I possess, and in my specimens I find a gland from which the pollen masses have fallen. Fourthly, the manifest close affinity between the Isle of France *Angræcums* and the *Limodorum falcatum* of Japan, and my *Aeranthès grandiflorum*, in both of which glands undoubtedly exist, persuades me that they are not really different in structure. Finally, the genus *Angræcum* has in some cases, as *A. calceolus*, *caulescens*, *crassum*, *palmatum*, &c. so completely the habit of the East Indian *Aerides*, that I feel great difficulty in believing them to be essentially different in the structure of their pollen masses.

This question can only be decided by a careful examination of good specimens, of which I am entirely destitute. I recommend the enquiry to those who are in possession of the requisite materials, or who are willing to oblige me by communicating them to me.

NOTE. The total number of Orchideous plants belonging to the Tribe Malaxidæ is as follows ;

Pleurothallæ described	162
doubtful	7—169
Dendrobiæ described	205
doubtful	6—211

Total 380

Their geographical arrangement is thus :

Names of the Genera.	Europe.	Siberia and Northern Asia.	North America.	Northern India and Nipal.	Continent of India.	Ceylon.	Indian Archipelago.	China.	Japan.	New Holland.	South Sea Islands.	America within the tropic.	South America beyond the tropic.	South Africa.	Mauritius, &c.	Africa within the tropic.	North Africa.
1. Pleurothallis . . .	.	.	.	.	.	.	.	.	.	.	.	14	.	.	.	.	.
2. Specklinia . . .	.	.	.	.	.	.	.	.	.	.	.	5	.	.	.	.	.
3. Octomeria . . .	.	.	.	.	.	.	.	.	.	.	.	3	.	.	.	.	.
4. Lapanthes . . .	.	.	.	.	.	.	.	.	.	.	.	4	.	.	.	.	.
5. Stella . . .	.	.	.	.	.	.	.	.	.	.	.	9	.	.	.	.	.
6. Ocyricera . . .	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
7. Chrysoglossum . . .	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.
8. Gastroglottis . . .	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
9. Restrepia . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
10. Oberonia . . .	.	.	.	4	1	2	6	.	.	.	3	.	.	.	.	.	.
11. Empusa . . .	.	.	1	.	.	.	.	.	.	.	.	.	.	.	1	.	.
12. Platystylis . . .	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.
13. Microstylis . . .	1	1	2	2	4	3	2	.	.	.	1	4	.	.	.	.	.
14. Dienia . . .	.	1	.	3	.	1	.	1	.	.	.	2	.	.	.	.	.
15. Malaxis . . .	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
16. Nephelaphyllum . . .	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.
17. Acianthus . . .	.	.	.	.	.	.	.	.	.	4	.	.	.	.	.	.	.
18. Cyrtosia . . .	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.
19. Liparis . . .	1	.	2	2	6	6	14	1	1	1	1	17	.	.	5	.	.
20. Dendrochilum . . .	.	.	.	.	.	.	6	.	.	.	.	.	.	.	1	.	.
21. Otochilus . . .	.	.	.	2	1	.	.	.	.	.	.	.	.	.	.	.	.
22. Coelia . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
23. Pholidota . . .	.	.	.	1	4	1	2	.	.	.	.	.	.	.	.	.	.
24. Diolchia . . .	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
25. Calogyne . . .	.	.	.	13	3	1	4	.	.	.	.	.	.	.	.	.	.
26. Diacrypa . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
27. Mesoclastes . . .	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.
28. Cochlia . . .	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
29. Lyraea . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
30. Megacclinium . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
31. Bolbophyllum . . .	.	.	.	7	6	.	22	2	.	.	1	.	.	.	.	2	.
32. Cirrhopetalum . . .	.	.	1	1	1	3	.	.	.	.	1	.	.	.	13	4	.
33. Trias . . .	.	.	.	2	.	.	.	.	.	.	.	.	.	.	1	.	.
34. Macrostromium . . .	.	.	.	.	2	.	1	.	.	.	.	.	.	.	.	.	.
35. Microcellia . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
36. Epicranthes . . .	.	.	.	.	.	.	1	.	.	.	.	.	.	.	1	.	.
37. Monomeria . . .	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
38. Stenoglossum . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
39. Diglyphosa . . .	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
40. Mycaranthes . . .	.	.	.	1	.	.	3	.	.	.	.	.	.	.	.	.	.
41. Phreatia . . .	.	.	.	.	.	1	6	.	.	.	.	.	.	.	.	.	.
42. Eria . . .	.	.	4	3	1	16	1	.	.	.	.	.	.	.	.	.	.
43. Aporum . . .	.	.	.	1	.	.	4	.	.	.	.	.	.	.	.	.	.
44. Oxystophyllum . . .	.	.	.	.	.	.	3	.	.	.	.	.	.	.	.	.	.
45. Polystachya . . .	.	.	.	.	.	1	.	.	.	.	.	1	.	.	3	1	.
46. Metachilum . . .	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
47. Dendrobium . . .	.	.	.	12	12	6	45	5	3	5	3	.	.	.	2?	.	.
Total	3	2	4	56	44	24	152	10	4	10	10	46	.	.	26	9	.

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\*.\* The Synonyms are in *Italics*. The Figures refer to the Numbers of the genera.

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THE  
GENERA AND SPECIES  
OF  
ORCHIDEOUS PLANTS.

BY JOHN LINDLEY, F.R.S. L.S. G.S. H. S.

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Part II. EPIDENDREÆ.

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LONDON:

J. HUNNEMAN, 9 QUEEN STREET, SOHO SQUARE,  
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London, August 22nd, 1831.





# ORCHIDEÆ.

## Tribe II. EPIDENDREÆ.

ORCHIDEÆ, Tribus EPIDENDREÆ. *Lindl. Orch. Scoletos.*

Pollen in massas cereaceas (pollinia) definitas cohærens, telâ cellulosâ in caudiculas elasticas pulvereas sæpius replicatas cohærente, glandulâ propriâ diaphanâ nullâ. Anthera terminalis, opercularis. Herbæ epiphytæ v. terrestres, sæpè caulescentes, nunc foliorum basibus v. caulibus in-crassatis, rarissimè radicibus carnosis lobatis.

The distinction of this Tribe depends upon the peculiar state of the caudicula, which is not transparent, and connected with the stigma by means of a gland as in Vandææ, but powdery, and very often turned back upon the face of the pollen masses. Some of the genera, such as Ceratium, in which this caudicula is very much reduced in size, approach Malaxideæ; nevertheless the limits of the Tribe seem sufficiently well defined.

### ARTIFICIAL ANALYSIS OF THE GENERA.

#### Pollinia 2.

Sepala et petala patentissima. Labellum semi-lunatum 48. COLLASIMUM.

#### Pollinia 4.

Labellum cum columna connatum.			
Columna mutica elongata. Caudiculæ 4	-	-	49. EPIDENDRUM.
Columna nana bicornis. Caudiculæ 2. Labellum basi			
tantum adnatum	-	-	50. DINEMA.
Columna mutica. Caudiculæ 2. Labellum plicis mem-			
branaceis inflexis columnæ connatum	-	-	71. PLOCOGLOTTIS.
Labellum liberum, v. ferè,			
basi in calcar productum ovario adnatum	-	-	57. BROUGHTONIA.
ecalcaratum,			
circa columnam convolutum,			
anticum. Sepala petaloidea explanata	-	-	56. CATTLEYA.
posticum. Sepala herbacea conniventia	-	-	51. ENCYCLIA.
explanatum,			
rectum. Sepala libera	-	-	52. ISOCHILUS.
medio refractum. Sepala lateralia in calcar spu-			
rium connata	-	-	53. PONERA.

*Pollinia 8.*

Labellum calcaratum, (calcare ab ovario libero), subintegrum, v. leviter trilobum. Anthera 8-locularis altè trilobum, posticum. Anthera 2-locularis - -	63. PHAJUS.
anticum. Anthera 6-8-locularis - -	64. CYTHERIS.
Labellum ecalcaratum, nunc basi saccatum, integerrimum, circa columnam convolutum, sepalis difforme. Anthera septis marginatis	66. ANIA.
sepalis conforme. Anthera septis incompletis	54. BRASSAVOLA.
patentissimum convexum - -	70. TAINIA.
trilobum, sessile, lobo medio unguiculato, basi tuberculato - -	65. CALLOSTYLIS.
basi nudo. Labellum basi in calcar produc- tum ovario adnatum - -	59. SPATHOGLOTTIS.
lobo medio sessili.	58. TETRAMICRA.
Sepala lateralìa basi æquilatera.	
Labellum posticum - -	- 55. LÆLIA.
Labellum anticum.	
Anthera 8-locularis. Labellum cum columna articulatum	} 60. BLETIA.
Anthera 4-locularis. Labellum circa columnam convolutum	
Sepala lateralìa basi obliqua - -	62. ARUNDINA.
unguiculatum, basi saccatum.	67. CERATIUM.
Anthera 4-8-locularis. Sepala conniventia	68. APATURIA.
Anthera 2-locularis. Sepala explanata	61. IPSEA.
basi non saccatum - -	69. TRICHOTOSIA.

## XLVIII. COLLABIUM.

Collabium, *Blume Bijdr.* 357.

Sepala patentia v. reflexa, lateralibus internè in calcar obtusum connatis. Petala conformia. Labellum ecalcaratum, ungue brevi sepalis lateralibus internè adnatum, limbo plano, semilunato, basi internè bicalloso, columnam amplectente. Columna obtusa, tortuosa, aptera. Anthera 2-locularis. Pollinia duo, ovato-globosa, caudiculis elasticis affixa.—Herba terrestris, radicibus (rhizomate?) repentibus, annulatis. Folia radicalia, remota, petiolata, elliptico-oblonga, nervosa, membranacea, nebulosa. Pedunculi radicales, elongati, simplices. Flores spicati, pedicellati, nutantes. *Character ex Blume.*

1. COLLABIUM nebulosum. *Blume, l. c.*Hab. in convalli fluvii Tjapus ad montem Salak, *Java*; *Blume.*

## XLIX. EPIDENDRUM.

Epidendrum. *Linn. Swartz Nov. Act. Ups.* 6. p. 66. t. 5. f. 2. *Brown in Hort. Kew.* ed. 5. 5. 217. *Auliza and Amphiglottis Salisb. in Hort. Trans.* 1. 261. &c.

Sepala patentia, subæqualia. Petala sepalis æqualia, v. angustiora, rariùs latiora, patentia v. reflexa. Labellum cum marginibus columnæ omninè v. parte connatum, limbo integro v. diviso, disco sæpiùs calloso, costato, v. tuberculato; nunc in calcar productum ovario accretum et cuniculum formans. Columna elongata: clinandrio marginato, sæpè

fimbriato. Anthera carnosa, 2-4 locularis. Pollinia 4, caudiculis totidem replicatis annexa.—Herbæ (Americanæ) epiphytæ, caule nunc apice v. basi pseudobulboso, nunc elongato apice folioso. Folia carnosa, rarissimè venis elevatis striata. Flores spicati, racemosi, corymbosi, v. paniculati, terminales v. laterales.

This most natural genus is unknown in the Old World. In its divisions I have followed M. de la Llave in distinguishing the pseudobulbous and caulescent species as two distinct tribes, to which I have added a third, characterized by its winged rachis. I know not how far the distinction between the species with a cuniculate ovarium, and those in which the labellum ends abruptly at the base of the column is important; but it is at present inapplicable to the genus, the circumstance not having been attended to in a great number of species.

§1. Foliis in pseudobulbos insidentibus.

§2. Foliis in caulem teretem distichis v. alternis; rachi terete.

a. Labello indiviso; v. repando.

b. — bilobo.

c. — trilobo; lobis lateralibus integerrimis: intermedio indiviso v. tantum emarginato.

d. — trilobo; lobis lateralibus laciniatis: intermedio indiviso v. tantum emarginato.

e. — quadrilobo; nempe trilobo: lobo intermedio bipartito.

§3. Foliis distichis; rachi alata ancipiti.

§ I. Foliis in pseudobulbos insidentibus. Bot. Reg. 1415.

1. EPIDENDRUM vitellinum.

E. foliis in pseudobulbos binis oblongis obtusis apice recurvis, racemo secundo terminali, sepalis petalisque ovato-lanceolatis acutis subæqualibus patulis, labello cuneato oblongo semilibero basi calloso.

Hab. in Mexico; Pavon. (exam. s. sp. in Herb. Lambert.)

Scapus 6-9 uncialis. Flores magni crocei nutantes. Labellum cum basi tantum columnæ connatum.

2. EPIDENDRUM cochleatum. Linn.

E. foliis in pseudobulbos ovals geminatim insidentibus oblongis acuminatis subundulatis, sepalis petalisque paulò angustioribus lineari-lanceolatis reflexis, labello cordato cochleato subrotundo, columnâ brevissimâ.

Epidendrum cochleatum. Linn. sp. pl. 1351. Jacq. ic. rar. 3. t. 605. Willd. no. 1. Bot. Mag. t. 572.

Hab. in insulis Indiæ Occidentalis vulgatissimum. (v. v. c. et hab. s.)

Sepala et petala viridia. Labellum purpureum apice intus viride; basi bicallosum. Ovarium cuniculo nullo.

3. EPIDENDRUM fragrans. Swartz.

E. foliis in pseudobulbum solitariis lanceolatis apice recurvis, scapo folio brevior, sepalis lineari-lanceolatis petalisque ovato-lanceolatis acuminatis patentibus, labello subrotundo cuspidato lineato integerrimo, racemo subtrifloro.

Epidendrum lineatum. Salisb. stirp. p. 10.

Epidendrum fragrans. Swartz Prodr. 122. Fl. Ind. Occ. 3. 1487. Willd. no. 2. Bot. Mag. no. 1669. Bot. Cab. t. 1039.

Hab. super truncos arborum vetustos Jamaicæ interioris; Swartz. (v. v. c.)

Rhizoma repens. Pseudobulbus ovalis. Flores pallidè virides, labelli postici lineis purpureis, odore nocturno et vespertino grato ambrosinco.

4. *EPIDENDRUM lancifolium*. Pavon. *Mss.*

*E. pseudobulbis elongatis teretibus, foliis oblongo-lanceolatis acutiusculis, racemo stricto terminali, sepalis petalisque lanceolatis acuminatis reflexis, labello cordato oblato-ovato cochleato.*

*Hab. in Mexico; Pavon. (exam. s. sp. in Herb. Lambert.)*

*Facies Epid. cochleati. Labellum venosum cristâ nullâ.*

5. *EPIDENDRUM bracteolatum*. Presl. in *Reliq. Hænk.* p. 100.

*E. pseudobulbis sulcatis, foliis oblongo-lanceolatis obtusis, scapo tereti simplici, sepalis petalisque lanceolatis patentibus, labello obcordato obtuso crenulato basi cristato.*

*Hab. in Guayaquil; Presl.*

*E. cochleato videtur affine.*

6. *EPIDENDRUM ligulatum*. *La Llave Nov. Veg. Descr.* 2.26.

*E. foliis in pseudobulbos binis? lanceolatis striatis, scapo filiformi, sepalis petalisque ligulatis reflexis, labello obcordato limbo subcrenato, capsulâ glabrâ.*

*Hab. in montibus Irapæi Mexici; La Llave.*

*Planta gracilis. Pseudobulbi ovati nudi. Flores purpureo-fusci, labello lutescente. Secundum autorem laudatum "E. adenocarpo differt fructu; sed aliis notis est illo valdè affinis;" at labellum huic tripartitum illi integrum, si fides ulla descriptionibus.*

7. *EPIDENDRUM pastoris*. *La Llave, Nov. Veg. Descr.* 2.23.

*E. foliis in pseudobulbos binis ternisve elliptico-oblongis, scapo ancipiti depresso paucifloro, sepalis petalisque subæqualibus lineari-lanceolatis patentissimis, labello cordato auriculato disco sulcato.*

*Hab. supra arbores Mexici versus Acuitzuine, Undamæum usque ad Arium in provincia Michuacanensi; Llave.*

*Planta repens parasitica. Flores odorem, quasi Vanillæ suavissimum emittentes, lutescentes lineis purpurinis striatis, labello purpureo maculato; Llave.*

8. *EPIDENDRUM labiatum*. Swartz.

*E. foliis oblongis acutis apice reflexis supra v. sub pseudobulbum nascentibus, scapis filiformibus paucifloris, sepalis petalisque oblongis obtusis concavis patentibus: anterioribus sub labello basi connatis, labello obovato subemarginato deflexo medio calloso.*

*Epidendrum labiatum. Swartz Prodr.* 124. *Fl. Ind. Occ.* 1.1493. *Willd. no.* 7.

*Liparis labiata. Spreng. Syst.* 3. 741.

*Hab. in arboribus Crescentiæ, &c. Hispaniolæ; Swartz.*

*Folia sesquipollicaria. Flores parvi. Petala purpurea luteo striata. Labellum sæpè posticum; Swartz.*

9. *EPIDENDRUM bidentatum*.

*E. foliis obovato-lanceolatis apice recurvis supra v. sub pseudobulbum nascentibus, racemo terminali erecto paucifloro, sepalis lanceolatis petalisque angustioribus patentibus, labello semilibero rhomboideo angulis utrinque uni-dentato.*

*Hab. in Mexico; Pavon. (exam. s. sp. in Herb. Lambert.)*

Scapus palmaris e spatha magna foliacea ortus. Squamæ pseudobulborum coriaceæ nitidæ Coelogynes more. Labellum apice callosum, tuberculis disci nullis.

10. *EPIDENDRUM* odoratissimum. *Bot. Reg.* 1415.

E. foliis in pseudobulbos ovatos corrugatos binis ensiformibus, racemo subsimplici longiore, sepalis oblongis petalisque cuneatis patentibus, labelli ferè liberi trilobi lobis oblongis obtusis integris subæqualibus disco calloso depresso.

*Macradenia lutescens.* *Lodd. Bot. Cab. non Bot. Reg.*

*Encyclia patena.* *Hooker Bot. Mag. t. 3013.*

Hab. propè *Rio Janeiro.* (v. v. cult.)

Flores viridi-purpurei odoratissimi.

This is a very different plant from Dr. Hooker's original species of *Encyclia*, and is distinguishable from *Epidendrum* in nothing whatever except the labellum being only slightly connected with the column, in which respect it agrees with *Epidendrum vitellinum*.

11. *EPIDENDRUM* squalidum. *La Llave Nov. Veg. Descr.* 2. 24.

E. foliis lanceolatis retusis in pseudobulbos binis, scapo simplici flexuoso, sepalis petalisque subæqualibus patulis, labello tripartito: laciniis lateralibus linearibus intermediâ subreniformi emarginatâ undulatâ 3-sulcatâ.

Hab. in montibus *Mexici* prope Vallisoletum; *Llave*.

Flores herbacei luridi, extûs purpurascens, labello albido postico; *Llave*.

12. *EPIDENDRUM* concolor. *La Llave Nov. Veg. Descr.* 2. 25.

E. foliis in pseudobulbos confertos lenticulares squitariis lato-lanceolatis acutis, scapo filiformi 5-floro, sepalis ligulatis, petalis linearibus, labello tripartito laciniis integris intermediâ majore.

Hab. supra arbores *Mexici* propè Vallisoletum; *La Llave*.

Planta gracillima. Bracteæ brevissimæ. Flores dilatè ochroleuci concolores; labellum striatum.

13. *EPIDENDRUM* venosum.

E. foliis ensiformibus obtusis supra et sub pseudobulbos fusiformes nascentibus, racemo striato simplici, sepalis lineari-lanceolatis petalisque angustioribus patentissimis, labello semilibero tripartito: laciniis lateralibus ovatis acutis intermediâ subrotundâ apiculatâ multo majore callo baseos et lineis tribus disci subramosis elevatis.

Hab. in *Mexico*; *Pavon.* (exam. s. sp. in *Herb. Lambert.*)

Scapus terminalis pedalis. Labellum usque ad dimidiam columnæ adnatum, album venis elevatis violaceis.

14. *EPIDENDRUM* atropurpureum.

E. foliis in pseudobulbos ternis lanceolatis margine revolutis, scapo erecto multifloro, sepalis petalisque patentibus oblongis cuneatis subæqualibus bicoloribus, labelli tripartiti laciniis lateralibus parvis ovatis integris, intermediâ maximâ cuneatâ dilatatâ altè bilobâ.

*Helleborine floribus atropurpureis.* *Plumier Mss.* — atropurpureum. *Sp. 9. ic. 178.*

f. 1. ed. *Burmanni*.

*Epidendrum atropurpureum.* *Willd. no. 115.*

Hab. in *Hispaniola* ; Plumier.

Flores aurei apicibus purpureis, labello undique purpurascente, callo disci atrorubente ; Plumier.

Plumier's Mss. and descriptions appear, from the copy in Mr. Lambert's Herbarium, to give a very clear account of this beautiful species ; yet Burmann has, with his usual skill, converted the figure into a caricature and the name auro-purpureum, into atropurpureum.

15. *EPIDENDRUM adenocaulon*. *La Llave* l. c. 2. 22.

E. foliis in pseudobulbos binis v. ternis ensiformibus coriaceis, scapo simplici glanduloso, sepalis petalisque lineari-lanceolatis subæqualibus patentissimis, labello tripartito laciniis lateralibus acutis involutis : intermediâ cordatâ emarginatâ obtusâ.

Hab. in *Mexico* supra arbores prope Vallisoletum ; Llave.

Scapus bi-tripedalis. Bractæ membranacæ vaginantes. Pedunculi glandulosi. Flores dilutè violacei ; labello venoso ; Llave.

16. *EPIDENDRUM adenocarpon*. *La Llave* l. c. 2. 24.

E. foliis in pseudobulbos binis lanceolatis coriaceis, scapo simplici, sepalis petalisque ligulatis obtusis, labello tripartito laciniis lateralibus acutis : intermediâ maximâ subrotundâ, capsulâ glandulosâ.

Hab. in montibus Irapæi, *Mexici* ; Llave.

Flores lutei, punctis linearibus purpurinis miniati. Labellum luridum, ungulâ lineis rubris striatâ ; Llave.

17. *EPIDENDRUM bifidum*. *Aubl.*

E. foliis in pseudobulbos subternis lanceolatis, scapo ramoso foliis multò longiore, sepalis oblongis acutis petalisque lanceolatis patentibus, labelli cuneati lobis lateralibus ovatis : intermedio maximo apice dilatato subreniformi sulcato basi in disco biappendiculato.

Helleborine flore papilionaceo. *Plum. sp.* 9. t. c. 186. f. 1.

*Epidendrum bifidum*. *Aubl. Guian. p.* 824. 20. *Swartz Fl. Ind. Occ.* 3. 1489. *Willd. no.* 3. *Redout. Lil. t.* 84.

*Epidendrum papilionaceum*. *West. St. Cruc. p.* 230. sec. *Willd.*

Hab. in arboribus ins. *St. Christophori, Bartholomæi* ; *Swartz* ; *St. Thomæ, Riedley*.

Scapus bitripedalis. Flores pallidè purpurei. Labellum atropurpureum, laciniis lateralibus ovatis ; intermediâ basi angustâ, supra medium sulcatâ, lacinulis duabus rotundatis sanguineis sulco adnatis : apice dilatatâ subreniformi : lobis subrotundis leviter undulatis, patulis, venosis ; *Swartz*.

18. *EPIDENDRUM ciliare*. *Linn.*

E. foliis in pseudobulbos geminatim insidentibus, sepalis petalisque linearibus acuminatissimis, labelli trilobi lobis lateralibus setaceo-pectinatis intermedio setaceo brevioribus, spicâ subquinqueflorâ.

*Epidendrum ciliare*. *Linn. Sp. Pl.* 1349. *Jacq. Amer.* 224. t. 179. f. 89. *Swartz. Nov. Act. Ups.* 6. 69. *Willd. no.* 21. *Ker in Bot. Reg. t.* 784.

*Auliza ciliaris*. *Salisb. in Hort. Trans. l. c.*

Hab. in *Martinica* ; *Jacquin* ; in ins. *St. Vincentii* ; *Hooker. (v. v. c. et hab. s. sp. comm. cel. Hooker.)*

E. cuspidato simillimum ; gracilius et laciniis labelli tenuissimis. Flores pallidè virides ; labellum album. Ovarium cuniculatum. Bractæ lineari-lanceolatæ, acuminatæ. Pseudobulbi clavati, vestiti.

19. *EPIDENDRUM cuspidatum*. *Loddiges*.

E. foliis in pseudobulbos ternatim insidentibus, sepalis lineari-lanceolatis acuminatis, petalis conformibus latoribus, labelli trilobi lobis lateralibus falcatis laciniatis intermedio lineari subæqualibus, spicâ subtriflorâ.

*Epidendrum cuspidatum*. *Lodd. Bot. Cab.* 10. *Ker in Bot. Reg.* 10. 783.

*Epidendrum ciliare*. *Bot. Mag.* 463.

Hab. in *Dominica*; *Loddiges*; *Mexico*; *Pavon*. (*hab. s. et v. v. c.*; *adest in Herb. Lambert.*)

Bracteæ breves, oblongo-lanceolatæ, sphacelatæ. Flores magni, lutei. Clinandrium denticulatum. Ovarium cuniculatum.

20. *EPIDENDRUM polystachyum*. *Humb. et Kunth. Nov. Gen. et Sp. Pl.* 1. 352.

E. foliis oblongis obtusis striato-nervosis geminatim in pseudobulbum insidentibus, scapo polystachyo, sepalis reflexis suboblongis acutis, petalis lanceolato-spatulatis, labelli trilobi lobis lateralibus irregulariter obovatis crenulatis: intermedio minore profundè emarginato.

Hab. in subfrigidis Andium *Pastoensium* inter pagum Yayanquer et flumen Guaitara: item sub cælo mitiori provinciæ *Lozensis* in convallibus Malacatensibus quæ Cinchonam tolerant, alt. 900-1080 hex. *Humboldt*.

Scapus subbipedalis polystachyus. Spathæ marcidæ. Spicæ solitariæ, geminæ aut ternæ, alternæ, distantes, subsesquipollicares, patulæ. Flores lutei. *Kunth*.

21. *EPIDENDRUM Michuacanum*. *La Llave l. c.* 2. 26.

E. foliis in pseudobulbos pyriformes ternis quaternisve ensiformi-lanceolatis, scapo ramosissimo, sepalis petalisque angustioribus cuneato-lanceolatis, labello tripartito laciniâ intermediâ reniformi bilobâ.

Hab. in montibus *Mexici*, provinciæ Michuacanensis, et prope Vallisoleum; *La Llave*.

Pseudobulbi magni. Folia pedalia et ultra conduplicata. Flores parvi, inodori, ochroleuci labello albicante; *La Llave*.

§ II. *Foliis in caulem teretem distichis, v. alternis; rachi terete.*

a. *Labello indiviso v. repando.*

22. *EPIDENDRUM fruticosum*. *Pavon. Mss.*

E. foliis distichis ovato-oblongis acutis, caule ramoso fruticoso, racemo terminali nutante, sepalis cartilagineis petalisque membranaceis ovato-lanceolatis acutis erectis, labello subrotundo cordato retuso apiculato undulato callis 4 magnis confluentibus in disco.

Hab. in *Mexico*; *Pavon*. (*exam. s. sp. Herb. Lambert.*)

Caulis ramosus, ascendens, vestigiis vaginarum vestitus, pennam columbinam crassus. Bracteæ lineari-lanceolatæ ovarii ferè longitudine.

23. *EPIDENDRUM filicaule*.

E. caule gracili ramosissimo, foliis linearibus acutis, sepalis cuneato-oblongis acutis petalisque filiformibus patentibus, labello subrotundo cordato retuso repando, spicis terminalibus 3-floris, rachi capillari.

Hab. in *Brazilia*. (*hab. s. sp. comm. amiciss. Prescott.*)

Flores parvi lineis tribus elevatis ad basin labelli.



24. *EPIDENDRUM ramosum. Jacq.*

*E. foliis linearibus obtusis emarginatis, racemis terminalibus laxis paucifloris, sepalis ovato-lanceolatis petalisque linearibus acutis patentibus, labello subcordato ovato acuto concavo rigido, bracteis ovarii longitudine, caule ramoso.*

*Epidendrum ramosum. Jacq. Amer. 221. t. 132. Swartz Fl. Ind. Occ. 1.1505. Willd. no. 16.*

*Isochilos ramosum. Spreng. Syst. 3.734.*

*Epidendrum rigidum. Lodd. Bot. Cab. t. 1600. non Jacquini.*

*Hab. in montibus Jamaicæ, in arboribus parasiticum; Swartz; in Martiniæ sylvis; Jacq.*

*Caulis subdichotomus. Flores parvi viridi-lutei. Variat magnitudine partium, simul ac latitudine foliorum; Swartz.*

25. *EPIDENDRUM diffusum. Swartz.*

*E. foliis oblongis, caule ancipiti, paniculâ terminali ramosissimâ, sepalis lineari-lanceolatis petalisque setaceis erecto-patentibus striatis, labello cordato acuminato basi bicalloso.*

*Epidendrum diffusum. Swartz Prodr. 121. Fl. Ind. Occ. 3.1503. Willd. no. 15.*

*Hab. in arboribus Jamaicæ temperatioris; Swartz; Mexico; Pavon. (exam. s. sp. in Herb. Lambert.)*

*Caulis semipedalis, erectus, infernè aphyllus, supernè subflexuosus. Panicula sæpè pedalis. Flores parvi sanguinei; Swartz. Descriptioni optimæ Swartzii nihil addere velim, nisi sepala petalis latiora et ter striata, dum hæc tantum semel.*

26. *EPIDENDRUM geminiflorum. Humb. et Kunth. Nov. Gen. et Sp. Pl. 1.354.*

*E. foliis oblongis obtusis coriaceis, pedunculis subbifloris, sepalis lanceolatis acuminatis patulis margine revolutis, petalis conformibus planis, labello ovato cordato subcucullato, caule repente ramoso.*

*Hab. in montanis opacatis provinciæ Popayanensis, inter flumen Mayo et pagum la Cruz, alt. 1040 hex. Humboldt.*

*Caulis semipedalis. Pedunculi rarè triflori spathâ oblongâ obtusâ pollicari inclusa. Flores flavovirentes; Kunth.*

27. *EPIDENDRUM fimbriatum. Humb. et Kunth. Nov. Gen. et Sp. 1.351.*

*E. foliis distichis linearibus obtusis rigidis, margine crenulatis, caule ramoso, sepalis oblongis obtusis patentibus, petalis conformibus paulò latioribus, labello ovato-subrotundo fimbriato, rachi racemi flexuosâ.*

*Hab. in Andibus Popayanensium, locis subapricis Parami Puracensis et in convalli fluminis El Vinagre, alt. 1370 hex. Humboldt.*

*Caules sex aut octopollicares. Florès albi. Labellum rubro-maculatum; ex Kunthio.*

28. *EPIDENDRUM umbellatum. Swartz.*

*E. foliis distichis oblongis subundulatis obtusis, sepalis lineari-oblongis obtusis petalisque linearibus patentibus, labello indiviso rotundato repando transverso basi bicalloso, floribus corymbosis.*

*Epidendrum umbellatum. Swartz Prodr. 121. Nov. Act. Ups. 6. 68. Willd. no. 14. Bot. Mag. 2030. Hort. Kew. 5. 218.*

*Epidendrum difforme. Jacq. Amer. 223. t. 136.*

*Epidendrum corymbosum. Fl. Peruv. Syst. 246?*

Hab. in *Jamaica*; Swartz; in *Martinica*; Jacquin; in ins. *St. Vincentii*; Hooker; in *Mexico*; Pavon. (*hab. s. sp. comm. cel. Hooker. et v. v. c.*)

Epiphyta, palmaris et ultrà, nunc sesquipedalis. Flores virides. Anthera intra clinandrium abscondita. Ovarium cuniculatum.

I retain the name of *umbellatum*, because it is now that which is generally adopted, although that of Jacquin, *difforme*, has the right of priority.

29. *EPIDENDRUM* orchidiflorum. Salzman.

E. foliis distichis lineari-oblongis obtusis, caule apice nudo vaginato, racemo brevi terminali, floribus carnosiss, sepalo supremo obovato lateralibus oblongis dimidiatis, petalis linearibus cuneatis, labello subrotundo basi unicalloso apice tridentato: dente intermediâ minore.

Hab. in fruticetis sabulosis *Bahæ*; Salzman. (*hab. s. sp.*)

Folia unciam v. sesquiunciam longa, 3-4 lineas lata, carnosissima, lucida. Caulis florifer pedalis. Ovarium cuniculatum. Flores magnitudine *E. fusci*.

30. *EPIDENDRUM* gramineum.

E. foliis distichis lineari-lanceolatis acutis striatis, racemo terminali paniculato, sepalis oblongis acutis, petalis linearibus, labello cordato acuto medio plicato basi calloso.

Hab. in *Peruvia*; Pavon. (*exam. s. sp. in Herb. Lambert.*)

I have only examined the unexpanded buds of this, but it is apparently a species distinct from any mentioned in the *Fl. Peruviana*, unless it should be the *E. acuminatum* of that work.

31. *EPIDENDRUM* acuminatum. *Fl. Peruv. Syst.* 248.

E. "foliis lanceolato-linearibus, racemo terminali, labello subhastato acuminato basi utrinque auriculato."

Hab. in Huassahassi montibus *Peruviae*; Ruiz et Pavon.

32. *EPIDENDRUM* ferrugineum. *Fl. Peruv. Syst.* 245.

E. "foliis oblongo-lanceolatis emarginatis, racemo simplici erecto, labello acuminato integro."

Hab. in Chinchao montibus nemorosis *Peruviae*; Ruiz et Pavon.

33. *EPIDENDRUM* lineare. *Fl. Peruv. Syst.* 249.

E. "foliis linearibus, racemo terminali subpaniculato, labello obcordato-cuneiformi basi utrinque dentato."

Hab. in nemoribus Chinchao, Muña, et Huassahuassi *Peruviae*; Ruiz et Pavon.

34. *EPIDENDRUM*? flexuosum. Meyer *Fl. Essequib.* p. 260.

E. foliis distichis carnosiss lanceolatis emarginatis, caule flexuoso, sepalis lanceolatis, petalis rhomboideis, labello acuminato subquadrato margine lacero.

Hab. in arboribus ad ripas rivi Arowabischkreek in *Essequibo*; Meyer.

Caulis 2-3 pedalis, compressus, a vagina ad vaginam flexuosus. Folia 6-pollicaria. Flores purpurei; ex Meyero.

July, 1831.

b. *Labello bilobo.*35. *EPIDENDRUM radicans.* Pavon. *Mss.*

E. foliis distichis cordatis ovatis obtusis, caule simplici apice aphylo vaginato, sepalis petalisque lanceolatis acutis patentibus, labello bipartito laciniis subcuneatis deflexis fimbriatis basi bicalloso.

Hab. in Mexico; Pavon. (exam. s. sp. in Herb. Lambert.)

Facies E. elongati. Caulis radices longissimas albas simplices promens.

36. *EPIDENDRUM cordatum.* Fl. Peruv. Syst. 244.

E. "foliis cordatis amplexicaulibus, paniculâ flexuosâ, labelli bifidi laciniis acuminatis recurvis."

Hab. in Chinchao montibus nemorosis et runcationibus supra arbores et saxa; Ruiz et Pavon.

37. *EPIDENDRUM volubile.* Fl. Peruv. Syst. 247.

E. "foliis oblongo-obovatis, ramis volubilibus, labelli bifidi laciniis lanceolatis."

Hab. in Peruviae præruptis, ad Acobamba; Ruiz et Pavon.

c. *Labello trilobo; lobis lateralibus integerrimis: intermedio indiviso v. tantum emarginato.*38. *EPIDENDRUM fuscatum.* Swartz.

E. foliis distichis oblongis undulatis apice recurvis, sepalis oblongo-lanceolatis, petalis linearibus, labelli trilobi cordati lobis lateralibus rotundatis: intermedio leviter emarginato disco calloso, spicâ globosâ recurvâ.

*Epidendrum fuscatum.* Swartz Nov. Act. Ups. 6. 69. Smith Spicil. Bot. 21. t. 23. Willd. no. 23. Bot. Reg. t. 67. Hooker in Bot. Mag. t. 2844. Loddiges Bot. Cab. t. 887.

*Epidendrum anceps.* Jacq. Amer. 224. t. 138.

*Amphiglottis lurida.* Salisb. in Hort. Trans. t. c.

Hab. in Jamaica; Swartz; Martinic; Jacquin. (v. v. c. et hab. s. c.)

Spica pedunculo foliis longiore squamoso insidens. Flores fusco-virides.

Petala in icone Hookeriano lutea, secundum alios fuscoviridia ut sepala.

Dr. Hooker's figure represents the species in a monstrous state: and the labellum is made too entire: the 3 lobes are very distinctly separated in all the specimens that I have seen.

39. *EPIDENDRUM ovalifolium.*

E. foliis distichis ovali-lanceolatis acutis, sepalis oblongo-lanceolatis, petalis linearibus, labelli trilobi cordati lobis lateralibus rotundatis mucronatis: intermedio lineari bilobo disco calloso basi bituberculato, racemo elongato.

Hab. in Mexico; Pavon. (exam. s. sp. in Herb. Lambert.)

E. fuscato valde affine; differt præcipuè foliorum formâ, labelli lobis lateralibus mucronulatis intermedio lineari bilobo, et racemis elongatis.

40. *EPIDENDRUM Hænkeanum.* Presl. Rel. Hænk. 100.

E. foliis distichis ovato-lanceolatis nervosis acutis, spicâ paniculatâ, sepalis oblongo-lanceolatis acutiusculis in basin attenuatis, petalis spatulatis, labelli trilobi lobis lateralibus rotundatis, medio minore obcordato.

Hab. in montosis Peruviae; Presl.

Scapus pedalis. Sepala 10 lineas longa. Folia 10 lineas lata.

41. *EPIDENDRUM pallidiflorum*. *Hooker Bot. Mag. t. 2980.*

*E. foliis distichis oblongis linearibus obtusis, sepalis petalisque lanceolatis obtusis patentibus, labelli trilobi lobis subæqualibus rotundatis: intermedii marginibus involutis, spicâ corymbosâ pedunculatâ.*

*Hab. in insula St. Vincentii; Gualding.*

*Flores pallidè ochroleuci concolores.*

42. *EPIDENDRUM lignosum*. *La Llave l. c. 2. 28.*

*E. foliis distichis lineari-lanceolatis emarginatis, sepalis petalisque patentibus . . . . ., labelli 3-partiti laciniis lateralibus obtusis intermedia convexâ integrâ, florum fasciculis sparsis.*

*Hab. supra arbores Mexici prope Vallisoletum; Llave.*

*Valdè affinis E. anisato. Flores herbacei punctati; labellum striis purpureis ad basin; Llave.*

43. *EPIDENDRUM nocturnum*. *Linn.*

*E. foliis distichis oblongis acutis, floribus subgeminis terminalibus, sepalis petalisque linearibus acuminatis patentibus, labelli trilobi lobis lateralibus ovatis integerrimis intermedio setaceo brevioribus.*

*Epidendrum nocturnum. Linn. Sp. Pl. 1349. Jacq. Amer. 225. t. 139. Swartz Nov. Act. 6. 69. Willd. no. 20.*

*Hab. in sylvis montosis Martinicæ; Jacquin.*

*Planta vix pedalis. Flores tripollicares, viridi-lutei, noctu odorem suavissimum exhalantes; Jacquin.*

44. *EPIDENDRUM nutans*. *Swartz.*

*E. foliis oblongis distichis undulatis obtusis, racemo nutante multifloro, sepalis oblongo-lanceolatis petalisque lineari-lanceolatis obtusis patentibus, labelli trilobi lobis lateralibus cordatis ovatis: intermedio transverso truncato apiculato basi bicalloso venis tribus elevatis.*

*Epidendrum nutans. Swartz Prodr. 121. Fl. Ind. Occ. 1. 1499. Willd. no. 13. Hooker Esot. Bot. 1. t. 50 optimè.*

*Hab. in arboribus montium Jamaicae occidentalis; Swartz. (v. v. c.)*

*Flores albo-virides vespere odorati. Ovarium cuniculatum.*

45. *EPIDENDRUM longiflorum*. *Humb. et Kunth. Nov. Gen. et Sp. Pl. 1. 354.*

*E. foliis oblongis obtusis striatis coriaceis, floribus paniculatis, sepalis petalisque lanceolato-linearibus acuminatis margine revolutis, labelli tripartiti laciniis lateralibus ovatis obliquè truncatis revolutis: intermedia lanceolatâ acuminatâ margine revolutâ duplò longiore.*

*Hab. in declivitate montis Puruguay, inter Andes Novo-Granatenses emicantis, juxta villam Aguacillas, alt. 1480 hex. Humboldt.*

*Caulis pendulus. Flores 4-5-pollicares, flavi; Kunth.*

46. *EPIDENDRUM cernuum*. *Humb. et Kunth. Nov. Gen. et Sp. 1. 353.*

*E. foliis oblongis obtusis coriaceis, spicâ cernuâ, sepalis lanceolatis margine revolutis cuspidatis, petalis conformibus paulò longioribus, labello trilobo margine reflexo: lobis lateralibus subrotundis intermedio triplò majore ovato obtuso.*

*Hab. ad arbores in crepidinibus Andium Popayanensium, intra villam La Erre et convallem Yanacatu alt. 880 hex. Humboldt.*

Caulis tripedalis et altior. Spica tripollicaris. Flores suavolentes flavo-virescentes. *Kunth.*

47. *EPIDENDRUM gladiatum.*

*E.* foliis distichis gladiiformibus, racemis terminalibus fasciculatis corymbosis recurvis, sepalis oblongis obtusis margine reflexis petalisque spatulatis patulis, labelli trilobi lobis lateralibus subquadratis rotundatis intermedio multò minore obcordato basi bituberculato.

Hab. in *Peruvia*; *Pavon.* (*exam. s. sp. in Herb. Lambert.*)

Caulis pedalis, verosimiliter simplex, basi nudus, durus, pennam scriptoriam crassus, supernè foliosus curvus. Racemi breves e vaginis pluribus erumpentes. Sepala 4 lineas longa. Folia 4 uncias longa, 3 lineas lata.

48. *EPIDENDRUM conopseum. R. Br.*

*E.* foliis binis radicalibus rigidis coriaceis, scapis multifloris, sepalis linearibus obtusis petalisque angustioribus spatulatis patentibus, labello obcordato obtusè trilobo.

*Epidendrum conopseum. R. Br. in H. Kew. 5. 219. Nutt. Gen. 2. 198.*

*Epidendrum Magnoliæ. Muhl. Cat. 81.*

Hab. in *Magnoliis Carolinæ et Georgiæ*; *Nuttall, Baldwin.* (*v. s. sp. in Herb. Lambert.*)

Planta 4-uncialis v. minùs. Flores lutei.

49. *EPIDENDRUM scabrum. Fl. Peruv. Syst. 248.*

*E.* "foliis ovato-lanceolatis marginibus vaginisque scabris, racemo terminali, labello cruciformi."

Hab. in *Pillao et Muña montibus Peruviæ*; *Ruiz et Pavon.*

d. *Labello trilobo; lobis lateralibus laciniatis v. emarginatis: intermedio indiviso v. tantum emarginato.*

50. *EPIDENDRUM polyanthum.*

*E.* foliis distichis ovali-lanceolatis acuminatis, caule ramoso, racemis plurimis multifloris cernuis basi spathaceis, sepalis ovato-lanceolatis acutis striatis, petalis linearibus reflexis, labelli trilobi lobis lateralibus ovatis dimidiatis denticulatis: intermedio lineari retuso disco tricoestado.

*Epidendrum polystachyum. Pavon. Mss. non H. B. K.*

Hab. in *Mexico*; *Pavon.* (*exam. s. sp. in Herb. Lambert.*)

Caulis pennam anserinam crassus, longus, ex axilla omni racemos cernuos promens. Folia sex uncias longa,  $1\frac{1}{2}$  lata. Sepala dura (in sicco), venis lignosis. Labelli laciniæ laterales erectæ, intermediæ margines incurvæ.

52. *EPIDENDRUM cinnabarinum. Salzmann.*

*E.* foliis distichis oblongis carnosis acutis convexis subrecurvis, caule simplici apice aphylo vaginato, sepalis petalisque lineari-oblongis acutis subæqualibus patentibus, labelli trilobi lobis lateralibus rotundatis laciniatis intermedio linguæformi apice furcato æqualibus.

Hab. in fruticetis sabulosis *Bahiæ*; *Salzmann.* (*hab. s. sp.*)

Facies *E.* elongati, sed flores triplo majores.

52. *EPIDENDRUM imatophyllum.*

*E.* foliis distichis ligulatis obtusis subemarginatis, caule simplici apice

aphyllo vaginato, sepalis petalisque lanceolatis æqualibus patentibus, labelli trilobi lobis lateralibus laciniatis patentibus: intermedio cuneato subundulato apiculato.

Hab. in *Guiana*; *Hooker*. (*hab. s. sp. comm. cel. Hooker*.)

53. *EPIDENDRUM ibaguense*. *Humb. et Kunth. Nov. Gen. et Sp.* 1. 352.

*E. foliis distichis oblongis obtusis carnosis, caule simplici apice aphylo, sepalis suboblongis acutis patentibus, petalis conformibus paulò minoribus, labelli trilobi lobo intermedio obcordato crenulato-fimbriato lateralibus fimbriatis ovatis dimidiatis apice rotundatis.*

Hab. in locis temperatis regni *Novo-Granatensis* inter urbem Ibague et nobilissimum montem Tolimæ, alt. 740 hex.; *Humboldt*.

Flores aurantiaci; *Kunth*.

54. *EPIDENDRUM elongatum*. *Jacq.*

*E. foliis distichis oblongo-lanceolatis acutiusculis, caule apice longè aphylo squamoso, sepalis petalisque patentibus lineari-lanceolatis æqualibus, labelli trilobi lobis lateralibus truncatis denticulatis: intermedio duplò majore cuneato apice dilatato emarginato denticulato basi calloso: callo carnosio concavo acuminato, racemo brevi oblongo.*

*Epidendrum elongatum. Jacq. Ic. Rar. 3. t. 604. Swartz Nov. Act. Ups. 6. 69. Willd. no. 24. Bot. Mag. t. 611.*

*Amphiglottis secunda. Salisb. Hort. Trans. l. c.*

Hab. ad *Caraccas*; *Jacq.* (*hab. s. sp. et v. v. c.*)

Flores pallidè coccinei. Ovarium cuniculatum. Tubus inter labellum et columnam septo dividitur longitudinali ex apice ovarii orto sub stigmate desinente.

55. *EPIDENDRUM crassifolium*.

*E. foliis distichis ovato-oblongis obtusis carnosis concavis, caule apice longe aphylo squamoso: squamis superioribus lineari-lanceolatis acuminatis, sepalis petalisque patentibus lineari-oblongis æqualibus, labelli trilobi lobis lateralibus dimidiatis denticulatis: intermedio cuneato apiculato denticulato majore basi calloso: callo carnosio concavo obtuso, racemo brevi subcorymboso.*

*Epidendrum ellipticum. Lodd. Bot. Cab. t. 1216. non Graham.*

Hab. in insula *St. Vincentii*; *Hooker*. (*hab. s. sp. comm. cel. Hooker*.)

This is known from *E. ellipticum* by the form of its leaves, by the lateral segments of the labellum being smaller than the middle one, by the upper scales of the aphyllous stem being somewhat foliaceous with a long rigid point, and if Mr. Loddiges's figure be correctly quoted, which I can scarcely doubt, by the lilac colour of its flowers.

56. *EPIDENDRUM ellipticum*. *Graham in Hook. Exot. Bot. t. 207.*

*E. foliis distichis ellipticis obtusis concavis succulentis, caule apice longè aphylo squamoso, sepalis petalisque patentibus lineari-lanceolatis æqualibus, labelli trilobi lobis lateralibus rotundatis laciniatis: intermedio minore truncato apice denticulato basi calloso, racemo brevi corymboso.*

Hab. in *Brazilia*, prope Rio Janeiro; *Graham, Forbes*. (*hab. s. sp.*)

Very near *E. elongatum*, from which it differs in its elliptical blunt succulent leaves, small middle segment of the labellum and more corymbose flowers, which are also paler.

57. *EPIDENDRUM secundum*. Linn.

*E. foliis distichis oblongis emarginatis, caule apice longè aphylo squamoso, sepalis petalisque æqualibus, labelli trilobi lobis lateralibus emarginatis conniventibus intermedio subrotundo concavo emarginato ascendente paulo minoribus, racemo brevi secundo.*

*Epidendrum secundum*. Linn. *Sp. Pl.* 1349. *Jacq. Amer.* 224. t. 137. *Willd.* no. 22.

Hab. in sylvis *Martinicæ* montosis; Jacquin.

Flores toti purpurei; *ex Jacq.*

58. *EPIDENDRUM dichotomum*. Presl. *Rel. Hænk.* 101.

*E. foliis distichis lanceolato-oblongis obtusis, caule apice aphylo squamoso subdichotomo, sepalis petalisque lanceolatis acutis reflexis, labelli tripartiti laciniis fimbriatis: lateralibus rotundatis patentissimis intermedia majore obcordatâ.*

Hab. in montosis ad Huanoco *Peruviæ*; Presl.

Scapus bipedalis. Folia 3 pollices longa. Flores flavescentes.

Seems very near *E. elongatum*.

*e. Labello quadrilobo, nempè trilobo: lobo intermedio bipartito; v. sexlobo.*

59. *EPIDENDRUM verrucosum*. Swartz.

*E. foliis distichis lanceolatis obliquè patentibus vaginis verrucosis, floribus subpaniculatis, sepalis oblongis concavis acutis petalisque lineari-lanceolatis patulis, labello 4-lobo laciniis linearibus obtusis divaricatis: anterioribus minoribus.*

*Epidendrum verrucosum*. Swartz *Fl. Ind. Occ.* 3. 1497. *Willd.* no. 11. *Lodd. Bot. Cab.* t. 1084.

Hab. in truncis arborum *Jamaicæ*; Swartz.

Caules simplices, erecti, 2-pedales v. suborgyales; sepala et petala pallide viridia; labellum luteum; scapi radicales; Swartz. Panicula terminalis; Loddiges. An duæ species hic confusæ?

60. *EPIDENDRUM patens*. Swartz.

*E. foliis distichis oblongo-lanceolatis, racemo terminali, sepalis petalisque subæqualibus oblongis acutis concavis patentibus, labelli quadrilobi lobis lateralibus subrotundis: anterioribus linearibus obtusis conniventibus.*

*Epidendrum patens*. Swartz *Fl. Ind. Occ.* 1. 1495. *Willd.* no. 10. *Bot. Cab.* t. 1537.

Hab. in sylvis montium *Jamaicæ*; Swartz.

Caulis spithamæus v. pedalis. Flores pallidi. Sepala extus carinata ferruginea.

61. *EPIDENDRUM paniculatum*. *Fl. Peruv. Syst.* p. 243.

*E. foliis distichis oblongo-lanceolatis acuminatis, caule apice vaginis acuminatissimis membranaceis vestito, paniculâ confertâ multiflorâ, sepalis oblongis venis extus varicosis, petalis filiformibus, labelli quadrilobi laciniis posticis brevibus oblongis obtusis: anticis linearibus divaricatis, disco callis tribus et tuberculis duobus.*

Hab. in *Huayaquil*; Pavon. (*exam. s. sp. in Herb. Lambert.*)

Species spectatissima. Panicula ferè pedalis floribus confertissimis. Bractææ subulatæ.

62. *EPIDENDRUM anisatum*. *La Llave l. c. 2. 27.*

E. foliis distichis elliptico-lanceolatis, sepalis petalisque patentibus linearibus obtusis, labelli tripartiti laciniis lateralibus obtusis intermediâ profundè bilobâ: lobis acutis.

Hab. supra arbores *Mexici* propè Vallisoletum; *Llave*.

Planta pedalis. Flores luridi noctu odorem anisatum emittentes, sæpius impunctati. Labellum lineis tribus purpureis ad insertionem; *Llave*.

63. *EPIDENDRUM floribundum*. *Humb. et Kunth. Nov. Gen. et Sp. 1.353. t. 86.*

E. foliis lanceolato-oblongis acuminatis submembranaceis, paniculâ terminali, sepalis reflexis lanceolatis, petalis filiformibus, labelli quadrilobi basi bituberculati lobis lateralibus subrotundis, terminalibus linearibus divaricatis.

Hab. in locis temperatis nemorosis provinciæ *Bracamorensis* inter Amazonum flumen, pagum Puyaya et urbem Jaen, alt. 930 hex. Humboldt; in *Mexico*; *Pavon*. (exam. s. sp. in *Herb. Lambert*.)

Caulis pedalis. Panicula semipedalis. Sepala viridia. Petala et labellum alba. Variat foliis oblongis, lanceolato-oblongis et linearibus; *Kunth*.

64. *EPIDENDRUM raniferum*.

E. foliis distichis lanceolatis obtusis, racemis terminalibus lateralibusque divaricatis multifloris, sepalis ligulatis undulatis apice recurvis petalisque linearibus cuneatis mucronulatis patentissimis, labelli sexlobi basi bicallosi laciniis integerrimis: posticis rotundatis—intermediis linearibus—anticis linearibus obtusis retrorsum falcatis.

Hab. in *Mexico*; *Pavon*. (exam. s. sp. in *Herb. Lambert*.)

Caulis crassus, verosimiliter 2-3-pedalis. Folia 7 uncias longa, unam lata. Racemi semipedales. Sepala 10 lineas longa.

This is in Mr. Lambert's Herbarium from Pavon under the names both of *Ophrys tigrina*, and *Epidendrum racemosum*; as I have no means of ascertaining which of these names was intended to be applied by the latter Botanist, I have not hesitated, in this and in other cases, to reject both.

65. *EPIDENDRUM coronatum*. *Fl. Peruv. Syst. 242.*

E. "foliis ovato-lanceolatis, racemis dependentibus, labello trilobo: laciniis bifidis intermediâ minori."

Hab. in *Pozuzo* supra arbores et saxa; Ruiz et Pavon.

66. *EPIDENDRUM cristatum*. *Fl. Peruv. Syst. 243.*

E. "foliis lanceolatis, racemo dependente, labello tripartito: laciniâ mediâ bifidâ, lateralibus tripartitis."

Hab. supra arbores in nemoribus *Pozuzo*; Ruiz et Pavon.

67. *EPIDENDRUM viride*. *Fl. Peruv. Syst. 244.*

E. "foliis lanceolatis acutis, racemo terminali, labii trilobi laciniis lateralibus obcordatis, intermediâ bifidâ."

Hab. in *Peruviæ* nemoribus ad *Pozuzo* vicum supra arbores; Ruiz et Pavon.

68. *EPIDENDRUM parviflorum*. *Fl. Peruv. Syst. 245.*

E. "foliis lanceolato-linearibus, racemo brevi, labelli trilobi laciniis subrotundis: intermediâ bipartitâ acutâ."

Hab. in *Muña* et *Chaclla* montibus *Peruviæ*; Ruiz et Pavon.



§ III. *Foliis distichis; rachi alata ancipiti: bracteis carinatis.*69. *EPIDENDRUM bifarium.* Swartz.

*E. foliis distichis cordato-lanceolatis horizontalibus, spicâ terminali flexuosa, rachi ancipiti, sepalis ovato-lanceolatis convexis, petalis brevioribus setaceis, labelli dilatati trilobi lobis lateralibus subrotundis integris: intermedio bilobo.*

*Epidendrum anceps.* Swartz Prodr. 121.

*Epidendrum bifarium.* Swartz Fl. Ind. Occ. 3. 1509. Willd. n. 19.

Hab. in montibus altis *Jamaicæ* australis, supra truncos arborum; Swartz. (v. s. sp. in Herb. Smith.)

Caulis 2-4-uncialis. Flores viridi-ulbi. Bracteæ subfalcatae, carinatae, ovarii longitudine; Swartz.

70. *EPIDENDRUM rigidum.* Jacquin.

*E. foliis distichis ovato-oblongis obtusis, spicæ flexuosæ rachi ancipiti, sepalis coriaceis ovatis obtusis patentibus lateralibus majoribus, petalis linearibus membranaceis, labelli postici cordato-ovati obtusi palato calloso cuniculo inflato, bracteis foliaceis dolabriformibus carinatis ovarii longitudine.*

*Epidendrum rigidum.* Jacq. Amer. 222. t. 134. Swartz Fl. Ind. Occ. 3. 1507. Willd. n. 17. β. labello subrotundo.

Hab. in sylvis montium *Jamaicæ*; Swartz; *Martinicæ*; Jacquin; *St. Vincentii*; Hooker; *Hispaniolæ*; Mackenzie; β *Mexico*; Pavon. (hab. s. sp. comm. cel. Hooker et Mackenzie; exam. β in Herb. Lambert.)

Caulis simplices, palmares, ancipites. Flores parvi, virides. β fortè species diversa.

71. *EPIDENDRUM imbricatum.*

*E. foliis distichis lineari-oblongis obtusis, caule ramoso, spicis ovato-oblongis imbricatis, sepalis petalisque ovatis acutis æqualibus erectis, labello ovato acuto obsolete crenulato, bracteis carinatis obtusis.*

Hab. in *Braziliæ*. (hab. s. sp. comm. amicis. Prescott.)

Ovarium altè cuniculatum.

\*\*\* *Species obscuræ, valdè dubiæ, auctoribus descriptæ, sed systemate vir admittendæ.*

*Epidendrum vomeriforme* (Swartz Prodr. 124. Fl. Ind. Occ. 3. 1511. Willd. n. 25.); "caulescens foliis bulbis innatis carnosis ovato-acuminatis convexis canaliculatis subtus carinatis, scapis e sinu foliorum." *Jamaica*; Swartz. Species minima. Flores ignoti. (v. s. sp. in Herb. Smith.)

*Epidendrum angustifolium* (Swartz Prodr. 123. Fl. Ind. Occ. 3. 1512. Willd. n. 26.); "folio lineari bulbo innato, scapo paniculato." *Jamaica*; Swartz.

*Epidendrum ? turbinatum* (La Llave Nov. Veg. Descr. 2. 41.); "bulbis oblongo-turbinatis confertis membranis laceratis præcinctis, scapo ex bulbis prodeunte, foliis lineari-lanceolatis coriaceis bulbo adnatis." *Mexico*; La Llave.

*Epidendrum ? mayzifolium* (La Llave Nov. Veg. Descr. 2. 42.); "bulbis fusiformibus pedalibus articulatis, foliis distichis ensiformibus trinerviis." *Mexico*; La Llave.

N. B. Species reliquas Floræ Peruvianæ prætereo.

## L. DINEMA.

*Dinema. Orch. Sceletos, p. 6.*

Sepala et petala subæqualia, herbacea, patentia. Labellum majus, membranaceum, indivisum, unguiculatum, cum basi columnæ accretum. Columna nana, bicornis. Anthera bilocularis. Pollinia 4, per paria caudiculis duobus replicatis adnata.—Herba epiphyta, rhizomate repente annulato pseudobulbifero. Folia coriacea. Flores solitarii, terminales, pedunculo vaginato.

This genus differs from *Isochilus* chiefly in its labellum being large, membranous and extremely different in appearance from the petals; and in these last, and the sepals being spreading not connivent. It is distinguished from *Epidendrum* by its short two horned labellum.

1. *DINEMA polybulbon.*

*Epidendrum polybulbon. Swartz Fl. Ind. Occ. p. 1491. Hooker Esot. Fl. t. 112.*

Hab. in *Jamaica*, Swartz; in *Mexico*, Pavon. (*v. s. sp. in Herb. Lambert.*)

Pseudobulbi ovales, squamis ovatis obtusis vestiti. Folia bina, oblonga, obtusa, pedunculis æqualia. Sepala et petala viridia, venis sanguineis. Labellum album. Columna sanguinea.

## LI. ENCYCLIA.

*Encyclia. Hooker in Bot. Mag. t. 2831.*

Sepala et petala subæqualia, conniventia. Labellum (posticum) cucullatum, columnam involvens, apice trilobum, basi callosum. Columna libera, semiteres, clavata, cum labello parallela. Anthera 4-locularis, septis marginatis. Pollinia 4, collateralia, caudiculis totidem revolutis.—Herba epiphyta, pseudobulbosa, *Epidendri* facie, foliis coriaceis. Inflorescentia terminalis.

This genus differs from *Cattleya* in its small half-closed flowers, the labellum of which is posterior with a great callus at its base, and also in its paniced flowers; otherwise it approaches it very nearly. From *Epidendrum* it cannot be distinguished either by its herbage, or inflorescence, and in its fructification is so similar to that genus that with the exception of its four celled anther, and cucullate labellum, it possesses no peculiar character. The posterior labellum is observed in many undoubted *Epidendra*, and in some species of the same genus the cohesion between the lip and the column is very slight. So slight indeed are the marks of distinction between *Encyclia* and *Epidendrum* that Dr. Hooker's second species of the former (*E. patens*) unquestionably belongs to the latter genus; see *Epidendrum odoratissimum*.

1. *ENCYCLIA viridiflora. Hooker l. c.*

Hab. in *Brazilia*, prope Rio Janeiro; Hooker.

Pseudobulbi ovati vaginâ scariosâ tecti. Folia ensiformia, subrecurva, acuta, per paria nata. Panicula multiflora. Flores herbacei, versus basin purpurascens. Sepala lineari-lanceolata, lateralibus subfalcata. Labellum lobis lateralibus ovatis obtusis, intermedio margine undulato.

## LII. ISOCHILUS.

*Isophilus*. *R. Brown in Hort. Kew. ed. 2. 5. 209. Kunth Nov. Gen. et Sp. Pl. 1. 340.*

Sepala et petala subæqualia, libera, conniventia; illorum anterioribus nunc basi paululum dilatatis et invicem connatis. Labellum unguiculatum, indivisum, petalis sæpius conforme, cum columna articulatum. Columna clavata, semiteres, bi-tricornis. Anthera 4-locularis. Pollinia 4, collateralia, caudiculis ligulatis replicatis.—Herbæ parvæ epiphytæ, caule nunc tereti distichè folioso, nunc pseudobulboso apice tantum folioso. Flores parvi, albi v. purpurei.

1. *ISOCHILUS* lineare. *R. Br.*

I. caule tereti, foliis distichis linearibus emarginatis, racemo cernuo terminali, labello lanceolato obtuso.

*Epidendrum* lineare. *Linna. Sp. Pl. 1349. Jacq. Amer. 221. t. 131. f. 1.*

*Cymbidium* lineare. *Swartz Nov. Act. Ups. 6. 72. Willd. no. 13.*

*Isophilus* linearis. *R. Br. l. c. Kunth Nov. Gen. et Sp. 1. 340. Bot. Reg. 9. t. 745. Bot. Cab. t. 1341.*

Hab. in sylvis densis *Martinicæ*; Jacquin. (v. v. c.)

Flores purpurei. Labellum sanguineo maculatum.

2. *ISOCHILUS* globosum.

I. caule simplici subunifloro, foliis teretibus canaliculatis, labello ovato acuto concavo, petalis quam sepala minoribus.

*Epidendrum* globosum. *Jacq. Amer. 222. t. 133. f. 1. Swartz Prodr. 121.*

*Cymbidium* globosum. *Swartz Fl. Ind. Occ. 1467. Willd. no. 17.*

Hab. in summis ramis arborum *Jamaicæ* interioris, Swartz; *Martinicæ*, Jacquin; *St. Vincentii*, Hooker. (v. s. sp.)

Flores minuti, rubicundi. Petala minora lutea.

3. *ISOCHILUS* teretifolium.

I. caule simplici folioso, foliis distichis teretiusculo-triquetris obtusis car-nosis, flore solitario, labello striato apice triquetro incrassato, petalis quam sepala duplò minoribus.

*Epidendrum* teretifolium. *Swartz Prodr. 121.*

*Cymbidium* teretifolium. *Swartz Fl. Ind. Occ. 1463. Willd. no. 15.*

Hab. in arboribus in montibus excelsis *Jamaicæ* australis; Swartz,

Caulis pedalis. Flòs luteo-viridis, terminalis in caule versus apicem nudo subcompresso.

4. *ISOCHILUS* graminifolium. *Kunth.*

I. caule ramoso folioso, foliis distichis linearibus acuminatis membranaceis, floribus axillaribus solitariis, labello obovato-oblongo obtuso basi angustato, sepalis petalisque lineari-lanceolatis subæqualibus.

*Isophilus* graminifolius. *Humb. Bonpl. et Kunth. Nov. Gen. et Sp. Pl. 1. 340. tab. 78. Synops. 1. 329.*

Hab. in declivitate Andium *Popayanensium*, nemoribus opacissimis inhorrescentium, juxta villam La Erre, ad radices Parami de Puruguay, alt. 1064 hexap. florens Novembri; Humboldt.

Caules erecti subpedales. Folia sesquipollicaria, vix duas lineas lata. Calyx albus, glaber. Capsula glabra; ex Kunthio.

5. *ISOCHILUS proliferum*. *R. Br.*

I. caule carnosio tereti subcylindraceo prolifero apice subdiphylo, foliis linearibus emarginatis, floribus axillaribus fasciculatis, labello lineari obcordato ungue calloso.

*Epidendrum proliferum*. *Swartz Prodr.* 124.

*Cymbidium proliferum*. *Swartz Fl. Ind. Occ.* 1451. *Willd.* no. 5.

*Ischilus prolifer*. *R. Br. in H. Kew. ed. 2.* 5. 209. *Lindl. in Bot. Reg.* 10. t. 825.

Hab. supra truncos vetustos inter muscos in montibus altis *Jamaicæ australis*; *Swartz.* (v. v. c.)

Flores albi e bracteis imbricatis nati. Labellum disco discolore.

6. *ISOCHILUS fusiforme*.

I. caule ovato tereti carnosio basi angustato prolifero, foliis linearibus emarginatis mucronatis, floribus solitariis axillaribus nudis, labello oblongo membranaceo apice dilatato triangulari.

Hab. in *Trinidad*; *Lockhart.* (v. v. c.)

Facies I. proliferi quo differt internodiis fusiformibus, floribus majoribus solitariis ebracteatis magis patentibus, et labelli disco non discolore. Flores albi concolores.

§ *Elleanthus*; *Presl.*

*Genus fortè distinctum, sed, characteribus auctoris nimis vagis, ab Isochilo nihil diversum nisi bracteis membranaceis floribus longioribus.*

7. *ISOCHILUS* ? *linifolium*.

I. caule simplici folioso, foliis distichis linearibus apice tridentatis, spicâ distichâ terminali, floribus bracteis inclusis.

*Elleanthus linifolius*. *Presl. Reliq. Henk.* p. 97.

Hab. in montanis *Peruviæ* ad Huanoco; *Presl.*

Caules semipedales, ancipites. Folia sesquipollicem longa, 1 lineam lata, glabra. Spica pollicaris breviorque. Bracteæ 5 lineas longæ. Flores flavescentes, sesquilineam longi; *Presl.*

8. *ISOCHILUS* ? *lancifolium*.

I. caule ancipiti vaginato apice triphylo, foliis lanceolato-nervosis serrulatis plicato-nervosis apice tridentatis, spicâ distichâ terminali reflexâ, floribus bracteis inclusis.

*Elleanthus lancifolius*. *Presl. Reliq. Henk.* 97.

Hab. in *Guayaquil*; *Presl.*

Caulis pedalis. Folia 4 pollices longa, vix 5 lineas lata. Vaginæ tuberculato-scabræ. Bracteæ ovato-lanceolatæ, longè acuminatæ, floribus duplò longiores. Flores flavescentes; *Presl.*

## LIII. PONERA.

Sepala membranacea, lateralia paulò majora, basi in saccum connata.

Petala multò angustiora. Labellum posticum, membranaceum; ungue concavo cum basi producta sepalorum lateralium articulado, ascendente, laminâ refractâ lineari subsagittatâ truncatâ subemarginatâ. Columna

semiteres cum ovario continua. Anthera bilocularis. Pollinia 4, collateralia, caudiculis reflexis.—Herba epiphyta, caule erecto, tereti, simplici, filiformi. Folia linearia subulata canaliculata secunda. Racemi subbiflori terminales. Flores parvi. Bracteæ ovatæ acutæ.

1. *PONERA juncifolia*.

*Epidendrum graminifolium*. Pavon. *Mss.*

Hab. in *Mexico*; Pavon. (*exam. s. sp. in Herb. Lambert.*)

Caules palmares. Folia vaginis minutissimè verrucosis. Racemus ex axilla folii terminalis quadruplo quintuplòvè longioris.

LIV. BRASSAVOLA.

*Brassavola*. *R. Brown in Hort. Kew. ed. 2. 5. 216.*

Sepala et petala subæqualia, libera, acuminata. Labellum cucullatum, integrum, columnam involvens. Columna marginata, clavata, stigmate infundibulari, clinandrio posticè tridentato. Pollinia 8, subæqualia, quibusdam aliis parvis interjectis. Anthera 4-locularis, septis marginatis, loculis semibipartitis.—Herbæ caulescentes, epiphytæ, apice folium unicum v. alterum, semicylindræum, carnosum, suprà sulcatum, apice subulatum, gerentes. Flores terminales, magni, speciosi.

1. *BRASSAVOLA cucullata*. *R. Brown in Hort. Kew. ed. 2. 5. 216.*

B. labello cucullato fimbriato apice integro petalis sepalisque acuminatisimis.

*Helleborine floribus albis cucullatis*. *Plum. Sp. 9. ic. 179. f. 1.*

*Epidendrum cucullatum*. *Linn. Sp. Pl. 1350. Bot. Mag. 543.*

*Cymbidium cucullatum*. *Swartz Nov. Act. Ups. 6. 73.*

Hab. in *India Occidentali*.

Flores solitarii ochroleuci labello albo.

2. *BRASSAVOLA tuberculata*. *Hooker in Bot. Mag. t. 2878.*

B. labello oblongo cuspidato integerrimo, sepalis pedunculo ovarioque tuberculatis, dentibus clinandrii fimbriatis.

Hab. in *Brazilia* ad Rio Janeiro; Hooker, *Forbes. (v. v. c. et hab. s. sp.)*

Folia sæpiùs tribus sulcis exarata. Sepala rubro-fusco maculata. Petala et labellum alba. Flores inodori.

Dr. Hooker's figure in the Botanical Magazine is excellent, and particularly well represents the rare circumstance of a few additional minute pollen masses being found with the usual ones. I formerly called this *Brassavola trinervis*, under which name it was distributed by the Horticultural Society.

3. *BRASSAVOLA nodosa*.

B. labello cordato acuminato integerrimo, sepalis petalisque acuminatis brevibus, dentibus lateralibus clinandrii integris posticà bifidà.

*Epidendrum curassavicum* Orchidi affine. *Herm. Parav. 187. t. 187.*

*Viscum delphinii* flore minus, &c. *Sloane Jam. 1. 251. t. 125. f. 1.*

*Epidendrum nodosum*. *Linn. Sp. Pl. 1350. Jacq. Amer. 226. t. 140. Swartz Obs. 328.*

*Cymbidium nodosum*. *Swartz Nov. Act. Ups. 6. 73. Willd. no. 24.*

Hab. in sylvis insulæ *Baru*, Jacquin, *Jamaicæ*; Sloane.

Planta pedalis speciosa. Flores sessiles, magni, elegantes, de die ferè inodori, noctu autem odore præditi fragrantissimo, vix ulli cedente, quidam habente Lillii albi, nectarium (labellum) gerunt niveum, et germen petalæque subflavescentia; *Jacquin*.

4. *BRASSAVOLA subulifolia*.

B. labello integro, sepalis petalisque acuminatissimis, spicâ pauciflorâ, foliis longissimis subuliformibus.

Hab. in insula *Nevis*; *Tobin*. (v. s. sp. in *Herb. Lambert*.)

Caules teretes, graciles, 4-5-unciales, cæspitosi, vaginis membranaceis cinereis arcuè vestiti. Folia palmaria et ultrâ, angustissima, acuminatissima. Ovarium collo gracillimo longissimo. Flores foliis breviores. Cætera haud bene vidi. Species distinctissima.

### LV. LÆLIA.

Sepala explanata, lanceolata, æqualia. Petala majora, paulò difformia, carnosa, explanata. Labellum posticum, 3-partitum, lamellatum, circa columnam convolutum. Columna aptera, carnosa, antice canaliculata. Anthera ..... Pollinia 8, caudiculis quatuor elasticis. — *Herbæ epiphytæ, rhizomate pseudobolbophoro. Folia carnosa. Scapi terminales, pauci v. multiflori. Flores speciosi, odorati.*

Character ex descriptione *Llavei*; genus videtur proprium, *Cattleyæ* proximum, labello postico et polliniis 8 diversum. *Phajo* differt labello postico ecalcarato, foliisque carnosius in pseudobulbos insidentibus. An congener *Cattleyæ Domingensis*?

1. *LÆLIA grandiflora*.

L. foliis lanceolatis, scapo 1-2-floro v. dichotomo, pseudobulbis pyriformibus.

*Bletia grandiflora. Llave Nov. Veg. Descr. 2. 17.*

Hab. supra truncos arborum in tota provincia Michuacana *Mexici*, florens Maio et Junio; Vernaculè *Lirio, Flor di Corpus; Itzumaqua* inter Michuacanos; *Llave*.

Folia bina aut terna. Bracteæ membranacæ, amplexicaules. Flos purpurinus, spithamæus, paululùm odoratus. Sepala lanceolata. Petala ovata, majora, carnosa, venosa, lateraliter emarginata. Labellum purpureo-violaceum, ad basin et medium albicans, profundè 3-partitum; lacinia intermediâ maximâ, emarginatâ, subcrenatâ, limbo undulato purpurascens, prominentiis variis petaloideis lutescentibus sulcatâ, punctis coloratis diversimodè maculatâ. *Llave*.

2. *LÆLIA autumnalis*.

L. foliis oblongo-lanceolatis carinatis arcuatis, scapo elongato multifloro, pseudobulbis turbinatis sulcatis.

*Bletia autumnalis. Llave Nov. Veg. Descr. 2. 19.*

Hab. in montibus Vallisoletto *Mexici* urbi vicinis, florens autumnus. Vernaculè *Flor de los Santos*; *Llave*.

Pseudobulbi bipollicares. Folia bina aut terna. Scapus tripedalis, purpurascens, bracteis membranaceis cinctus. Flores fragrantissimi, duplò minores quam in præcedente. *Llave*.

An *Cattleya Domingensis*, cujus pollinia et folia ignota, huc referenda?

## LVI. CATTLEYA.

*Cattleya.* *Lindl. Coll. Bot. tab. 33.*

Sepala membranacea v. carnosa, patentia, æqualia. Petala sæpiùs majora. Labellum cucullatum, columnam involvens, trilobum v. indivisum. Columna clavata, elongata, semiteres, marginata, cum labello articulata. Anthera carnosa, 4-locularis, septorum marginibus membranaceis. Pollinia 4, caudiculis totidem replicatis.—Herbæ epiphytæ, (Americanae) pseudobulbosæ. Folia solitaria v. bina coriacea. Flores terminales, speciosissimi, sæpè e spatha magna erumpentes.

This genus passes into *Broughtonia* through *C. Domingensis*.

1. CATTLEYA crispa. *Lindl.*

*C. sepalis linearis-obovato-lanceolatis acutis, petalis latioribus oblongo-lanceolatis undulatis crispis, labelli indivisi limbo ovato acuminato quam maximè undulato-crispato, pseudobulbis subcylindraceis angulatis, spathâ magnâ foliaceâ.*

*Cattleya crispa.* *Bot. Reg. t. 1172.*

Hab. in *Brazilia*; (v. v. c.)

Flores maximi albi puri, labelli disco tantum purpureo.

2. CATTLEYA labiata. *Lindl.*

*C. sepalis linearibus, petalis membranaceis lato-lanceolatis acutis subundulatis, labello obovato undulato obtuso indiviso, pseudobulbis oblongis angulatis, spathâ maximâ foliaceâ.*

*Cattleya labiata.* *Coll. Bot. tab. 33. Hooker Exot. Fl. 157.*

Hab. in *Brazilia*; *Swainson.* (v. v. cult.)

Flores maximi lilacini, disco labelli sanguineo.

## 3. CATTLEYA Grahmi.

*C. sepalis lanceolatis acutis, petalis oblongo-lanceolatis obtusiusculis undulatis triplò latioribus membranaceis, labelli trilobi marginibus edentulis: lobo medio maximo plano subrotundo.*

Hab. in *Mexico*; *Dom. Graham.* (hab. florem singulum comm. cel. *Grahamio.*)

Species spectatissima cujus flores tantum noti verosimiliter violacei, concolores, magnitudine *C. labiatæ*.

## 4. CATTLEYA maxima.

*C. sepalis linearis-lanceolatis obtusis, petalis oblongo-lanceolatis acutis undulatis triplò latioribus membranaceis, labelli oblongi trilobi lobo medio oblongo undulato altè emarginato.*

Hab. in *Huayaquil*; *Ruiz et Pavon.* (exam. s. sp. in *Herb. Lambert.*)

Flores maximi, verosimiliter violacei, expansione 7 unciarum ab apice sepalis posterioris ad emarginationem labelli. *C. Grahmi* affinis: differt forma lobi medii corollæ, nec non floribus ferè duplò majoribus. Folium oblongum, angustum, carnosum, utrinque obtusum.

5. CATTLEYA Loddigesii. *Lindl.*

*C. sepalis linearis-oblongis petalis oblongis obtusis membranaceis paulò angustioribus, labelli trilobi lobis denticulatis: intermedio transverso undulato, pseudobulbis angustis cylindraceis, spathâ magnâ foliaceâ.*

*Epidendrum violaceum.* *Loddiges Bot. Cab. t. 337.*

*Cattleya Loddigesii.* *Coll. Bot. tab. 37.*

Hab. in *Brazilia.* (v. v. c.)

Flores lilacini, labello pallidior, apice albido, maculâ nullâ disci, per axia 5-striato.

6. *CATTLEYA intermedia.* *Graham.*

C. sepalis petalisque lineari-oblongis obtusiusculis subæqualibus, labelli trilobi lobis denticulatis: intermedio cordato rotundato in disco maculato, pseudobulbis clavatis compressis, spathâ herbacæâ.

*Cattleya intermedia.* *Graham in Bot. Mag. t. 2851.*

Hab. in *Brazilia*; *Prof. Graham.*

Flores lilacini, labello pallidior in disco sanguineo.

I adopt this species in deference to the opinion of Drs. Graham and Hooker; not having had an opportunity of seeing the plant myself. From the beautiful figure of the latter, it appears to differ from *C. Loddigesii* in nothing but having the middle lobe of the lip rounder, and the disk stained with purple. No dependence is to be placed upon the proportion between the length of the scape and the peduncle; that character being very much affected by the degree of vigour of the individual.

7. *CATTLEYA Forbesii.* *Lindl.*

C. sepalis petalisque subundulatis lineari-lanceolatis subæqualibus, labelli trilobi lobo medio cordato subrotundo-ovato argutè dentato undulato apiculato: lateralibus minoribus rotundatis planis, pseudobulbis cylindraceis cinereis vestitis, spathâ cylindraceâ membranaceâ pedunculo brevior.

*Cattleya Forbesii.* *Coll. Bot. t. 37. in textu. Bot. Reg. t. 953.*

Hab. in *Brazilia* prope Sebastianopolim; *Forbes.* (v. v. cult.)

Sepala et petala viridi-lutea. Labellum album intus luteum rubro venosum et punctatum; per axin lineis duabus elevatis.

8. *CATTLEYA citrina.*

C. floribus carnosus pendulis, sepalis ovatis, petalis angustioribus emarginatis crenulatis, labelli trilobi lobo intermedio undulato emarginato, pseudobulbis turbinatis.

"*Corticoatzontecoxochitl.* *Hernand. Mex. 1. p. 240.*"

*Sobralia citrina.* *Llave Nov. Veg. Descr. 2. 21.*

Hab. supra arbores in montibus Vallisoletto, urbi *Mexici*, proximis, florens Maio et Aprili; vernaculè *Tatzingueni*; *Llave.*

Folia glaucescentia. Flores bini v. solitarii, citrini, odoratissimi, concolores; labelli lobo medio venoso.

9. *CATTLEYA elatior.*

C. sepalis petalisque oblongis æqualibus acutis, labelli trilobi lobis lateralibus rotundatis: intermedio plano cuneato unguiculato apice bilobo.

Hab. in *Brazilia.* (v. v. cult.)

Caules cæteris elatior. Flores magnitudine *C. Forbesii.* Sepala luteo-rosea. Petala rosea. Labellum lobis lateralibus albis, intermedio roseo; axis elevatus, carnosus, 7 striatus.



10. *CATTLEYA guttata*. *Lindl.*

*C. floribus carnosis, sepalis lineari-oblongis obtusis, petalis conformibus paulò latioribus undulatis, labelli trilobi lobis lateralibus ovatis obtusis: intermedio cuneato obcordato disco tuberculato, foliis concavis, spathâ obsoletâ. Bot. Reg. fol. 1406.*

*Hab. in Brazilia. (v. v. cult.)*

*Flores pallidè virides sanguineo guttati. Labelli lobi laterales albi, intermedius purpureus, lineis disci purpurei tuberculatis. C. elatiori affinis.*

11. *CATTLEYA Domingensis*.

*C. sepalis lineari-lanceolatis acutis petalis oblongis obtusiusculis triplò angustioribus, labello indiviso obovato obtuso plicato-crispo, scapo tereti squamoso apice racemoso multifloro basi bulboso.*

*Hab. supra arbores in insula St. Domingo; Mackenzie. (hab. s. spont. comm. cel. Mackenzie.)*

*Folia ignota. Flores verosimiliter violacei, in genere minores, membranacei. Scapus bipedalis, teres. Facies Broughtoniæ sed character Cattleyæ.*

## LVII. BROUGHTONIA.

*Broughtonia. R. Brown in Hort. Kew. ed. 2. 5. 217.*

*Sepala angusta, patentia, lateralia basi obliqua, cum labelli basi connata et decurrentia. Petala latiora. Labellum indivisum, ascendens, basi columnæ adnatum, in calcare lineari, mellifluo, ovario connato decurrens. Columna brevis, crassa, apice dilatata. Anthera 4-locularis, septorum marginibus membranaceis. Pollinia 4, caudiculis replicatis. — Herba epiphyta, pseudobulbosa, foliis carnosis, scapo terminali multifloro.*

This genus differs essentially from *Cattleya* not only in its habit, but also in the presence of a spur adhering to the ovary, and to the decurrent front edge of the lateral sepals. It is true that the presence or absence of such a spur is accounted of no importance in *Epidendrum*, but in that genus it is unattended by other characters either of structure or habit.

Mr. Brown seems to be acquainted with other species of *Broughtonia*, but as I am in possession of no other than *B. sanguinea* I have not thought it advisable to retain his specific diagnosis. *Tetramicra*, which agrees with *Broughtonia* in its cuniculate ovary, is I think essentially distinct.

1. *BROUGHTONIA sanguinea*. *R. Br.*

*Viscum radice bulbosâ minus, &c. Sloane Jam. 119. Hist. 1. 250. t. 121. f. 2.*

*Satyrium parasiticum, &c. Brown Jam. 324.*

*Epidendrum sanguineum. Swartz Prodr. 124.*

*Dendrobium sanguineum. Swartz Fl. Ind. Occ. 1529. Willd. no. 3.*

*Broughtonia sanguinea. R. Br. l. c. Loddiges Bot. Cab. t. 793.*

*Hab. non procul a litoribus Oceani Jamaicam alluentis, in arboribus vultustis Bombacis, Rhizophoræ, Conocarpi, &c.; Swartz. (v. v. c.)*

*Pseudobulbi aggregati, ovati, compressi, nitidi. Scapus terminalis pedalis et ultrâ, racemosus. Flores toti purpureo-sanguinei. Pollinia alba. Labellum subrotundum, cordatum, truncatum, margine erosum, basi luteum, venis purpureis pictum.*

## LVIII. TETRAMICRA.

Sepala et petala lineari-oblonga, patentia, subæqualia. Labellum explanatum, tripartitum, cum columna parallelum, laciniâ intermediâ subunguiculatâ disco lineatâ; calcare ovario connato. Columna alata, in labellum prona. Anthera 8-locularis, loculis 4 minoribus. Pollinia 8, quorum 4 minima, per caudiculas quatuor cohærentia.—Scapus longus, teres, squamosus, apice racemosus. Folia brevia, linearia, carnosâ, recurva.

Spathoglotti et Bletia valdè affinis; priore differt labelli lobo medio basi non tuberculato, secundo labello tripartito explanato, ambobus foliis carnosâ nec plicatis, et polliniis 4 subobsoletis. Broughtonia distinguitur antherâ 4-loculari, dissepimentis membranaceo-marginatis, polliniis 4, et collo ovarii valdè elongato.

## 1. TETRAMICRA rigida.

*Cymbidium rigidum*. Willd. no. 48.

Helleborine foliis rigidis angustis. Plum. Sp. 9. t. 181. f. 1.

Hab. in Hispaniola; Dom. Mackenzie. (hab. s. sp.)

Scapus gracilis, erectus, bipedalis. Folia 4-uncialia. Labelli laciniæ laterales oblongæ rotundatæ; intermedia angustior, spatulata, rotundata, lineata.

## LIX. SPATHOGLOTTIS.

Spathoglottis. Blume Bijdr. 400. tabellen 76.

Sepala patentia, libera, æqualia. Petala paulò latiora magisque membranacea, patentia v. conniventia. Labellum cum basi columnæ articulatæ, nunc saccatum, tripartitum, laciniâ intermediâ unguiculatâ basi tuberculatâ v. cristatâ sæpius utrinque unidentatâ. Columna alata v. petaloidea. Anthera bilocularis. Pollinia 8.—Herbæ Asiaticæ, terrestres, cormis subterraneis, foliis ensiformibus plicatis. Flores verosimiliter lutescentes.

This genus is distinguished from Bletia by the middle segment of the deeply three parted lip being unguiculate with two tubercles or lamellæ at its base, and by its two-celled anther.

## 1. SPATHOGLOTTIS plicata. Blume.

S. racemo multifloro, bracteis petaloideis lanceolatis coloratis, sepalis ovatis acutis patentibus, petalis oblongis obtusis conniventibus, labelli laciniis lateralibus cuneato-oblongis truncatis: intermediâ unguiculatâ cuneatâ retusâ basi bituberculatâ utrinque unidentatâ.

Spathoglottis plicata. Blume Bijdr. p. 401. tab. 76.

Bletia angustata. Gaudich. Voy. p. 421. tab. 32.

Hab. in locis sylvaticis insulæ Javæ, Blume; in Penang, Wallich; in Luzonibus, Gaudichaud. (hab. s. sp. e Museo Anglo-Indico.)

Folia plura, ensiformia, plicata. Scapus nunc bipedalis, multiflorus, nunc sesquipedalis 2-florus. Labellum ad axillas tuberculorum pilosum. Sepala, petala, et bractæ post anthesin grandescunt. Columna elongata, semiteres, apice inflexa.

Aug. 1831.

2. *SPATHOGLOTTIS pubescens*. Lindl. in Wall. Cat. Herb. Ind. no. 3744.

S. foliis binis lineari-lanceolatis basi angustatis striatis scapo erecto longioribus, racemo secundo, bracteis minutis acutis, sepalis ovatis acutis, petalis oblongis obtusis, labelli basi saccati laciniis lateralibus oblongis erectis: intermediâ tricarinatâ basi bituberculatâ cuneatâ parum longiore, pedunculis sepalis ovariisque pubescentibus.

Hab. in Prome, monte Taong Dong et alpibus Sillet; Wallich. (hab. s. sp. e Museo Anglo-Indico et v. ic. pict.)

Tuber nucis avellanæ magnitudine, subdepressus. Folia bina, lineari-lanceolata, utrinque acuminata, scapo breviora. Scapus radicalis, ascendens, pubescens, sesquipedalis, squamis paucis distantibus obtusis vaginatus. Racemus 2-8-florus, secundus. Flores sordidè lutei. Labellum basi subviolaceum.

3. *SPATHOGLOTTIS ixioides*. Lindl. in Wall. Cat. Herb. Ind. no. 3745.

S. foliis binis lineari-lanceolatis basi angustatis scapi unibiflori longitudine, bracteis vaginantibus obtusis, sepalis ovatis acutis petalisque oblongis undulatis patentibus, labelli ventricosi saccati laciniis lateralibus erectis apice angustatis obtusis: intermediâ minore cuneatâ basi bidentatâ ungue bilamellatâ.

Cymbidium ixioides. Don Prodr. Nep. 36.

Hab. in Gossain Than; Wallich. (hab. s. sp. e Museo Anglo-Indico.)

Cormi pisi magnitudine. Scapus 3-4-uncialis. Flores diametro unciali. Columna petaloidea. Lamellæ labelli utrinque pilosæ.

4. *SPATHOGLOTTIS?* trivalvis. Lindl. in Wall. Cat. Herb. Ind. no. 3742.

Hab. ad Singapur; Wallich. (hab. s. sp. defloratum e Museo Anglo-Indico.)

Species vix nota, huc ex autoritate cl. Wallichii relata. Flores ignoti, racemosi. Capsula fabæ equinæ magnitudine, 3-valvis, valvis oblongis intermediis nullis. Folia bina, linearia, obtusa, scapo subramoso erecto multò breviora.

## LX. BLETIA.

Bletia. Fl. Peruv. Syst. 229. Gyas. Salisbury in Act. Hort. Soc. 1. 261.

Sepala patentia, æqualia. Petala nunc patentia, nunc conniventia, sepalis subæqualia. Labellum cucullatum, cum columna articulatum, nunc basi saccatum, trilobum, disco sæpiùs lamellato v. tuberculato. Columna elongata, semiteres. Anthera carnosa, 8-locularis. Pollinia 8, æqualia, caudiculis 4 pulvereis cohærentia.—Herbæ subterrestres, foliis ensiformibus plicatis, scapis racemosis multifloris, floribus sæpiùs speciosis. Lindl. in Bot. Reg. 1401.

Phajo differt labello ecalcarato, cum labello articulato, sæpiùs trilobo, et habitu peculiari; Spathoglotti accedit per Bletiam coccineam.

1. *BLETIA catenulata*. Fl. Per.

B. sepalis oblongo-lanceolatis, petalisque ovato-lanceolatis patentibus, labelli cucullati lobis lateralibus rotundatis abbreviatis: intermedio subrotundo emarginato convexo unguiculato, foliis lanceolatis.

Bletia. Fl. Peruv. Prodr. t. 26. — catenulata. Fl. Peruv. Syst. p. 229,

Hab. in montibus et runcationibus Pozuzo, et Chacila, versus St. Domingo et Llamapañani Peruviae tractus; Ruiz et Pavon. (adest in Herb. Lambert.)

Characterem ad iconem Floræ Peruvianæ et exemplar defoliatum innominatum in herbario Lambertiano confeci; an rectè? Icon exemplari satis respondet, et exemplar diagnosi Floræ Peruvianæ.

2. *BLETIA florida*. R. Br. Hort. Kew. ed. 2. 5. 206.

B. sepalis ovali-lanceolatis obtusiusculis subpatentibus, petalis latioribus obtusis supra columnam fornicatis, labelli disco costis quinque rectis indivisis: lobis lateralibus rotundatis abbreviatis, intermedio cuneato crispo lamellis tribus undulatis apice abruptis, scapo simplici radicali, foliis ensiformibus. Lindl. Bot. Reg. t. 1401.

*Cymbidium floridum*. Salisb. Prodr. 9.

*Gyas florida*. Salisb. in Act. Soc. Hort. 1. 261.

*Bletia pallida*. Lodd. Bot. Cab. t. 629.

Hab. in Trinidad; Loddiges. (v. v. c.)

Flores pallidè carnei.

In the Botanical Register I have pointed out the differences between this and *B. verecunda*, and also explained my reasons for rejecting the synonym of Redouté quoted by Mr. Brown, and for considering *B. pallida* as the real *B. florida*.

3. *BLETIA verecunda*. R. Br. in Hort. Kew. 5. 206.

B. sepalis ovatis acutis subpatentibus, petalis oblongis obtusis supra columnam fornicatis, labelli lobo medio latiore quam longo undulato: disci costis plurimis crispis nunc ramosis, scapo radicali ramoso, foliis ensiformibus.

*Helleborine radice arundinacea*, foliis plicatis. Plum. Sp. 9. ic. 189.

*Helleborine Americana*, &c. Mart. Cent. t. 50. Mill. ic. 145.

*Limodorum altum*. Linn. Syst. Veg. 680. Jacq. Ic. Rar. 3. t. 602. Swartz Obs. 323. Bot. Mag. 930.

*Limodorum verecundum*. Salisb. Prodr. 9.

*Limodorum tuberosum*. Jacq. Coll. 4. 108.

*Limodorum trifidum*. Mich. Amer. 159.

*Cymbidium verecundum*. Swartz Nov. Act. 6. 75. Willd. no. 43.

*Cymbidium altum*. Willd. no. 44. Pers. Syn. 2. 516.

*Limodorum purpureum*. Redout. Lit. 83.

*Gyas verecunda*. Salisb. in Act. Soc. Hort. 1. 261.

Hab. in India Occidentali. (hab. s. c. et v. v. c.)

Sepala purpurea extùs pallidiora. Petala purpurea. Labelli purpurei costæ luteæ nunc ramosæ, nunc omninò simplices, margo pallidior. Pollinia vix cereacea, potius cereaceo-pulverea.

The character of the ribs of the disk of the labellum being branched in this species, as stated by Mr. Brown in the Hortus Kewensis, is inconstant.

With regard to the union of *Cymbidium altum* with *Cymbidium verecundum*; the former was introduced by Willdenow upon the supposition that its labellum was destitute of ribs, and that the figure given by J. Burmann in his edition of Plumier was a faithful one at least in general character. It is however evident from Plumier's drawings, of which I have examined copies in Mr. Lambert's Herbarium, that Burmann's figure is execrable, and that the plant discovered by Plumier is in no respect different from *Cymbidium verecundum*.

Another blunder has been committed by the same Burmann and copied without comment by others, which is of less importance, but rather

more curious. He makes Plumier call the ensiform leaves of this species *lyrate*! In the collection of Plumier there are two drawings, one of the natural size, the other reduced; on one of them is written *foliis licatis*, an obvious clerical error for *plicatis*; on the other *foliis liratis*, a further mistake of the same nature.

4. *BLETIA hyacinthina*. R. Br.

B. sepalis petalisque lineari-oblongis patentibus, labello cucullato medio lamellato: laciniis crispis intermediâ emarginatâ, bracteis subpetaloideis, racemo simplici paucifloro terminali foliis ensiformibus æquali v. parum longiore.

*Limodorum striatum*. Thunb. Jap. 28. Ic. Pl. Jap. t. 9.

*Epidendrum striatum*. Thunb. Act. Soc. Linn. 2. 327.

*Cymbidium striatum*. Swartz Nov. Act. 6. 77. Willd. no. 60.

*Cymbidium hyacinthinum*. Smith Exot. Bot. 1. t. 60. Bot. Mag. 1492.

*Gyas humilis*. Salisb. in Hort. Trans. 1. 261.

*Bletia hyacinthina*. Brown. in Hort. Kew. 5. 206.

Hab. in China, et Japonia; Thunb. (hab. s. cult. v. v. c. et s. sp. in Herb. Lamb.)

Scapus foliosus. Flores rosei, concolores. Bracteæ roseæ, margine vire-scentes.

In the Hortus Kewensis the labellum is called imberbe; it is however distinctly lamellate. There can be no doubt of Thunberg's synonym; but his figure is very bad; Japanese specimens in Mr. Lambert's Herbarium establish the fact beyond controversy.

5. *BLETIA speciosa*. Kunth.

B. scapo radicali subunifloro, sepalis lanceolatis reticulatis patulis, petalis paulò majoribus oblongis obtusis crenulatis, labelli trilobi lobo medio subrotundo-ovato obtuso crenulato, foliis lineari-oblongis, pseudobulbis oblongis.

*Bletia speciosa*. Humb. Bonpl. et Kunth. Nov. Gen. et Sp. 1. 342. Synopsis 1. 330.

Hab. in locis calidis regni Mexicani juxta littus Oceani Pacifici inter portum Acapulci et Playas de Coyuca, florens Februario; Humboldt.

Herba parasitica. Folia striata, tripollicaria, dimidium pollicem lata, vaginantia. Scapus sexpollicaris, glaber. Calyx violaceus? glaberrimus; sepala subtripollicaria; labelli lobus medius sesquipollicaris; ex Kunthio.

6. *BLETIA campanulata*. Llave.

B. sepalis petalisque lanceolatis subæqualibus campanulatis, labelli laciniis lateralibus convolutis: intermediâ planâ appendicibus petaloideis longitudinaliter sulcatâ; limbo undulato, foliis ensiformibus.

"Tzacucochitl, seu florida Tzautli. Hernandez Mexic. v. 1. p. 238. ed. Madrid."

*Bletia campanulata*. Llave Nov. Veg. Desc. 2. 17.

Hab. prope Vallisoletum urbem Mexici, versus Irapæum et Acuitzium, florens Augusto; Llave.

Planta pedalis, gracillima. Flores purpureo-violacei; petala albicantia; labellum albo-violaceum; ex Llave.

7. *BLETIA coccinea*. Llave.

B. sepalis petalisque subæqualibus, labelli tripartiti laciniis lateralibus convolutis: intermediâ pendulâ profundè emarginata: costis tribus petaloideis, foliis binis ensiformibus scapo tereti brevioribus.

"*Tonaloxochitl*, sive *Tsacuxochitl* altera. *Hernand. Mexic. v. 1. p. 239. ed. Medrit.*  
*Bletia coccinea. Llave Nov. Veg. Descr. 2. 16.*

Hab. rarissimè juxta Tztitzium, prope Vallisoletum, urbem *Mexici*, supra radices arborum, florens Augusto; Llave. (*adest in Herb. Lambertiano.*)

Bracteæ breves acuminatæ. Flores dilutè coccinei, velutini; *ex Llave.*

*Obs.* Costæ disci labelli ad basin lobi intermediï abruptè prominent; hinc *Spathoglottis* faciem quodammodo induit.

8. *BLETIA punctata. Llave.*

B. sepalis petalisque subæqualibus cuneiformibus, labelli trilobi laciniâ intermediâ latiore: limbo undulato, foliis lato-lanceolatis scapo brevioribus.

*Bletia punctata. Llave Nov. Veg. Descr. 2. 15.*

Hab. supra arborum radices, in montibus Irapæi, *Mexici*, florens a Junio ad Augustum; Llave.

Sepala et petala ferrugineo-virescentia, punctis purpureis variegata. Labellum luteum eodem modo punctatum. Columna lineis rubris maculata. Scapus tripedalis, ferrugineus, punctis rubris maculatus; *ex Llave.*

9. *BLETIA capitata. R. Br.*

B. "labello prope basin intus callo adnato, caule folioso, floribus capitatis."  
*R. Br. in Hort. Kew. 5. 206.*

Hab. in *India Occidentali*; R. Brown.

10. *BLETIA obcordata.*

B. caulescens, sepalis petalisque linearibus æqualibus obtusis, labelli trilobi patuli lobis lateralibus abbreviatis rotundatis: intermedio obcordato, scapo laterali multifloro racemoso, foliis oblongo-lanceolatis acuminatis.

Hab. in *Sillet*; *Wallich. (v. ic. pict.)*

Caulis erectus pedalis. Folia 6 uncias longa, sesquiunciam lata, subquiquenervia. Scapus foliis demissior, pedalis, basi squamis quibusdam laxis obtusis vaginatus. Flores parvi, longipedunculati, ochracei, pedicellis capillaribus. Labellum rubro leviter venosum.

11. *BLETIA tuberculosa. Spreng. Syst. 3. 744.*

B. sepalis ovato-lanceolatis acutis petalisque lineari-lanceolatis patentibus, labelli cucullati ventricosi apice trilobi laciniis crispis: intermediâ majore transversâ emarginatâ basi trituberculatâ, foliis .....

*Limodorum tuberosum. Thouars tab. 31.*

Hab. in *Madagascar*; Thouars.

Flores purpureo-lutei; *Thouars.*

12. *BLETIA villosa. Ach. Rich. Orch. Maur. p. 42.*

B. sepalis petalisque angustioribus ovato-lanceolatis acutis patentibus, labello integerrimo subcordato undulato acuminato medio villosa, foliis ellipticis acutis.

*Limodorum villosum. Thouars tab. 32.*

Hab. in *Mauritio*; Thouars.

Flores purpurascens; labellum concavum, non cucullatum; columna libera. An omninò congener, cum differt labello integerrimo non cucullato?

13. *BLETIA* aphylla. *Nuttall Genera* 2. 194.

B. aphylla, labello trifido costato, scapo racemoso squamoso.

Hab. in *Carolina*, et *Florida*; Nuttall.

Species singularis Nuttallio tantum descripta, qui characterem ferè nullum peculiarem demonstravit, nisi foliorum absentiam.

14. *BLETIA* latifolia. *Gaudich. Voyage* p. 421.

B. "foliis lineari-lanceolatis striato-multinerviis (9-15) membranaceis planis scapum subæquantibus, scapo elongato simplici erecto multifloro." *Gaudich.*

Hab. in insulis *Moluccis* (Rawak) ad terram; Gaudichaud.

An potius *Spathoglottis*?

Nota. Adsunt præterea in Systemate Floræ Peruvianæ et Chilensis species quatuor, imperitissimè notatæ, quarum duæ auctoribus illius operis tantum ex iconibus Tafallæ innotuere. Has omnes prætermitto, prout mera scientiæ ænigmata.

## LXI. IPSEA.

Sepala pubescentia, explanata, æqualia, lateralibus basi obliquis cum pede columnæ connatis saccum mentientibus. Petala subæqualia. Labellum concavum, trilobum, lamellatum, columnâ parallelum, sed nullo modo convolutum, ungue brevi saccato cum basi producta columnæ articulat. Columna elongata, semiteres, subclavata. Anthera membranacea, bilocularis, tuberculis duobus carnosus intus ad basin. Pollinia 8, quorum 4 minora, caudiculis pulvereis colligata.—Herba terrestris, radice carnosâ subbilobâ, lateralibus fibrosis. Folia serotina, ensiformia, plicata. Scapus simplex, vaginatus. Flos solitarius, speciosus, terminalis.

Genus notatu dignissimum ob radices carnosas bilobas *Orchidis* cujusdam ad instar, characterè insolito inter *Orchideas* polline cereaceo donatas, et inter *Epidendreas* planè ignoto, nisi fortè in *Apaturia* cujus radices nondum visæ sunt. Ab hoc genere, præter habitum, differt sepalis explanatis, lateralibus basi obliquis cum pede columnæ connatis. *Bletia* distinguitur labello convoluto, anthera 2-nec 8-loculari, nec non sepalis lateralibus æquilateris.

1. *IPSEA* speciosa.

Hab. in montibus *Zeylonæ*, in apricis, rarissimè, florens Novembri; *Macrae*. (*hab. s. sp. et v. ic. pict.*)

Radix media nucis castanæ magnitudine, succulenta, inæqualiter biloba, gemmâ solitariâ in summo; laterales fibrosæ, succulentæ, *Orchidis* cujusdam ad instar. Folia bina, basi vaginata, angustè ensiformia, palmaria. Scapus pedalis v. sesquipedalis, purpureus, pubescens, vaginis quibusdam apice sub-foliaceis tomentosis. Flores sæpius solitarii,

nunc gemini, speciosi, lutei, unicolores, odoratissimi. Sepala pubescentia, ferè duas uncias longa, oblonga, lateralibus basi obliquis cum basi columnæ producta connatis. Petala paulò angustiora, obtusa. Labelli lacinia media oblonga, obtusa, lamellis 5 distantibus, laterales latæ, acutæ. Ovarium et columna pubescentes. Anthera villosa.

## LXII. ARUNDINA.

*Arundina. Blume Bijdr. p. 401. tabellen 73.*

Sepala lineari-lanceolata, æqualia, basibus paululùm connatis, patula. Labellum circa columnam convolutum, cum ea non articulatam, trilobum v. integrum, medio cristatum v. lineis quibusdam elevatis. Columna recta, cum labello parallela, semiteres, clavata. Anthera 4-locularis. Pollinia 8, æqualia.—Herbæ caulescentes, terrestres, foliis distichis ensiformibus plicatis. Flores purpurei, speciosi.

Phajo differt præcipuè labello ecalcarato omninò libero, antherâ 4-loculari, columnâ basi non productâ, et foliis distichis.

1. *ARUNDINA bambusifolia. Lindl. in Wall. Cat. Herb. Ind. no. 3751.*

A. labello intus lamellis duabus carnosis undulatis cristatis et alterâ rectâ intermediâ breviorē: lobis lateralibus abbreviatis integris subobsoletis, intermedio bilobo laciniis divaricatis crispis, petalis lanceolatis, foliis acuminatis.

*Cymbidium bambusifolium. Roxb. Hort. Beng. 63.*

*Bletia graminifolia. Don. Prodr. Fl. Nep. 29.*

Hab. in *Napalia, Sillet, et Chittagong, Wallich. (hab. s. sp. e Museo Anglo-Indico.)*

Caulis verosimiliter 2-3-pedalis Bambusæ facie. Folia ensiformia, acuminata, patentia, pedem longa, 6 lineas lata. Racemus multiflorus, foliis longior, subramosus. Bractæ ovatæ, acutæ, cucullatæ. Flores speciosi. Labellum unciam et dimidiam longum.

2. *ARUNDINA minor.*

A. labello intus lineis 3-5-elevatis integro apice obtuso undulato, petalis sepalis parum latioribus, foliis apice abruptè acutis.

Hab. ad ripas fluvii Mahawelli Ganga in *Zeylona, Macrae. (hab. s. sp. et ic. pict.)*

Herba terrestris, pedalis, caule simplici, stricto, basi in cormum dilatato. Folia 3 uncias longa, 2½ lineas lata, apice triangularia acuta. Racemus pauciflorus foliis elatior. Bractæ ovatæ, acutæ, cucullatæ. Petala et sepala lanceolata rosea. Labellum luteum, liberum, circa columnam convolutum, apice roseum.

3. *ARUNDINA Chinensis. Blume Bijdr. p. 402.*

A. "labello intus lineis 5 nudis cristato, limbi lobo medio rotundato." *Blume.*

Hab. in *Java, fortè e China* introducta, *Blume*; propè *Macao, Rev. G. H. Vachell. (hab. s. sp. comm. cel. Henslow.)*

Folia strictissima, acuta, superiora 7 uncias longa 3 lineas lata. Racemus terminalis, folia vix excedens, subsexflorus. Bractæ rigidæ, ovatæ, cucullatæ. Flores circa 15 lineas a basi ad apicem longi, speciosi.



Sepala lineari-oblonga, obtusa. Petala duplè latiora, et paulò longiora, oblonga, utrinque angustata. Labellum magnum, ventricosum, lobis lateralibus maximis rotundatis undulatis intermedio rotundato bipartito. Talia video in exemplare Chinensi. An species Blumii omninò eadem?

I have some doubt whether the Chinese species now described is the same as Blume's *Arundina Chinensis*. Of the peculiarities comprehended in his very brief diagnosis, one, the nature of the lines upon the disk of the labellum, cannot be ascertained in my specimens, and the other, the rounded form of the middle lobe of the limb, although in accordance with that of the plant before me, nevertheless not being connected with a reference to the bipartite state of the same part, can by no means be said to be exactly recognized. I am however unwilling to create a new species out of materials so imperfect as mine.

4. *ARUNDINA speciosa*. *Blume Bijdr. p. 401. t. 73.*

A. labello intus lineis 3 barbatis cristato, lobis integris subundulatis apice angustatis, intermedio multò longiore: ungue lato plicato, limbo latiore quam longo rotundato emarginato undulato, petalis lanceolatis.

Hab. in lapidosis provinciarum Buitenzorg, Tjanjor, Krawang, &c. insulæ Javæ, Blume.

### LXIII. PHAJUS.

*Phajus*. *Loureir. Fl. Cochinch. 2. 529.* *Pachyne. Salisb. in Act. Soc. Hort. 1. 261.*

Sepala et petala subæqualia, patentia, libera. Labellum sæpiùs cucullatum, cum basi columnæ adnatum, calcaratum, integrum v. trilobum, sæpiùs suprà carinatum lamellosum v. cristatum. Columna erecta, cum ovario continua, semiteres, marginata, elongata. Anthera 8-locularis. Pollinia 8, subæqualia. — *Herbæ terrestres, (Asiaticæ) caulescentes v. acaules, foliis latis plicatis. Scapi radicales. Flores speciosi.*

From *Bletia* this genus is distinguished by the labellum being constantly connate with the base of the column and spurred, while in *Bletia* the labellum is constantly articulated with the column and never spurred.

1. *PHAJUS grandifolius*. *Loureiro.*

P. acaulis, foliis oblongo-lanceolatis acutis, sepalis petalisque oblongo-lanceolatis intùs discoloribus, labello oblongo cucullato integro crispo apice emarginato, calcare arcuato emarginato.

*Phajus grandifolius*. *Lour. Fl. Cochinch.*

*Limodorum Tankervillei*. *Hort. Kew. ed. 1. 3. t. 12. Willd. no. 1.*

*Limodorum Incarvillei*. *Pers. Syn. 2. 520.*

*Pachyne spectabilis*. *Salisb. in Hort. Trans. 1. 261.*

*Bletia Tankervillei*. *R. Br. in Hort. Kew. ed. 2. 5. 207. Bot. Mag. 1924. Illustrations of Orchideous plants, passim.*

Hab. in China. (v. v. c.)

Flores albi intùs fusci. Labellum album intùs aureo rubroque varium, supra bicarinatum.

2. *PHAJUS Wallichii*.

P. acaulis, foliis oblongo-lanceolatis acutis, sepalis petalisque lanceolatis labelloque cucullato crispo integro acuminatissimis, calcare arcuato emarginato, bracteis acuminatis. *Lindl. in Wall. Pl. As. Rar. vol. 2. p. 46. tab. 158.*

*Phaius grandifolius*. Lindl. in Wall. Cat. Herb. Ind. no. 3747 nec Lour.

Hab. in Sillet, Wallich. (hab. s. sp. e Museo Anglo-Indico et v. ic. pict.)

Facies omnino *P. grandifolii* cum quo male confudi. Sepala extus nivea intus fusca. Petala intus fusca, extus minus nivea. Labellum album, intus pallido flavo et rubore paululum suffusum.

In Dr. Wallich's Catalogue I committed what I now believe to have been an error, in referring this to the *Phaius grandifolius* of Loureiro. In general appearance it bears much resemblance to it, but upon more full consideration I have come to the conclusion that the Sillet plant is to be distinguished by its very acuminate bractæ, sepals and petals, and also by the labellum not only having a point gradually tapering into a long point, as in *Brassavola nodosa*, but being also destitute of the rich yellow and red marking of the Chinese species.

### 3. *Phaius Blumei*.

P. "sepals acuminatissimis, labello intus bicristato, limbo semitrilobo, lobo medio maximo undulato, gynostemio subnudo." Blume Bijdr. p. 374 sub *Limodorum Incarvillei*.

Hab. .... Cultus in hortis Java; Blume.

The above diagnosis applied by Dr. Blume to his *Limodorum Incarvillei* is so entirely at variance with *Phaius grandifolius* and with all others here described that I cannot doubt its belonging to a distinct species.

4. *Phaius veratrifolius*. Lindl. in Wall. Cat. Herb. Ind. no. 3746.

P. caulescens, foliis oblongo-lanceolatis acuminatis, sepalis petalisque lineari-oblongis acutiusculis, labello obovato-oblongo crispo integro repando apice emarginato, calcare recto conico obtuso.

*Dendrobium veratrifolium*. Rosb. Hort. Beng. p. 63.

Hab. in Sillet, Wallich. (hab. s. sp. e Museo Anglo-Indico et v. ic. pict.)

Pseudobulbi oblongi, nigro-virides. Caulis bipedalis. Folia immaculata. Scapus caule brevior. Bractæ obovato-lanceolatæ. Sepala et petala pallide flava. Labellum luteum, non cucullatum, lobis lateralibus obsoletis ab intermedio parvo emarginato vix distinguendis; ergo integrum repandum dicitur.—Obs. Descriptio et diagnosis ab icone Wallichiano, cum exemplaria nimis sint imperfecta ad partes ritè distinguendas.

This must not be confounded with *Limodorum veratrifolium* of Roxburgh, which is the type of the genus *Calanthe*.

5. *Phaius maculatus*. Lindl. in Wall. Cat. Herb. Ind. no. 3748.

P. caulescens, foliis ovato-lanceolatis acuminatis maculatis, sepalis petalisque oblongis obtusis, labelli trilobi lobis apice plicato-crenatis: lateralibus rotundatis intermedio ovato obtuso multò minoribus, calcare recto oblongo obtuso.

*Bletia flava*. Wall. in Bibl. Anglo-Indica ic. 1147.

*Bletia Woodfordii*. Hooker. Bot. Mag. t. 2719.

Hab. in Napalia, Wallich; nec in insula Trinitatis. (hab. s. sp. e Museo Anglo-Indico et v. ic. pict.)

Caulis bipedalis. Pseudobulbi ovato-oblongi. Scapus radicalis, foliis duplò brevior 10-12-florus. Bractæ obovatæ. Flores flavi. Labellum ad apices loborum fusco-purpureo marginatum et maculosum. Columna pilosa.

Aug. 1831.

There must have been some mistake on the part of Mr. Aiton, when he communicated this fine plant to Dr. Hooker as a native of Trinidad. The Nipalese specimens in Dr. Wallich's possession are indeed imperfect, but I have been permitted to examine a drawing in the possession of the East India Company, which supplies all deficiencies in the specimens, and which agrees entirely with the figure in the Botanical Magazine. I could not adopt Dr. Hooker's name without perpetuating an error, and that of Dr. Wallich is preoccupied by Dr. Blume; this will I trust be considered a satisfactory explanation of a new specific name having been applied.

6. *PHAJUS* bicolor.

*P. acaulis, foliis lanceolatis acuminatis, sepalis petalisque (angustioribus) lanceolatis acuminatis, labello cucullato ventricoso integro limbo obtuso cuspidato undulato, axi versus basin lamellis duabus planis, calcare cylindraceo arcuato apice emarginato ovarii longitudine.*

*Hab. in pascuis siccis ad latera collium Zeylonæ, Macrae. (hab. s. sp. et v. ic. pict.)*

*Scapus foliis elatior. Sepala et petala lutea. Labellum roseum calcare luteo.*

7. *PHAJUS* albus. *Lindl. in Wall. Cat. Herb. Ind. no. 3749.*

*P. caulescens, foliis oblongo-lanceolatis acutis subtus glaucis, sepalis petalisque oblongo-lanceolatis acutis subæqualibus, labello oblongo cucullato denticulato apice rotundato: disco 5-cristato, calcare rectiusculo emarginato. Lindl. in Wallich. Plant. As. Rar. vol. 2. t. 198.*

*Hab. in Napalia, et montibus Sillet, Wallich. (hab. s. sp. e Museo Anglo-Indico et v. ic. pict.)*

*Epiphytus. Caulis subbipedalis, foliis inferioribus minoribus, infernis squamæformibus. Racemus terminalis, 3-4-florus, foliis brevior. Bracteæ magnæ, herbacæ, oblongo-lanceolatæ, concavæ, ferè floribus æquales. Flores albi, speciosi. Labellum ferè 2 uncias et dimidiam longum, disco luteo, venis roseis.*

8. *PHAJUS* callosus.

*P. sepalis petalisque oblongis obtusiusculis subundulatis, labello cucullato trilobo plicato margine crispo: lobis lateralibus rotundatis intermedio bilobo brevioribus, apice bicalloso axi elevato carnosio, calcare recurvo obtuso emarginato, columnâ nudiussculâ.*

*Limodorum callosum. Blume Bijdr. 374. tab. 61.*

*Hab. in montosis Javæ, florens ferè per totum annum; Blume.*

9. *PHAJUS* flavus.

*P. "subcaulescens, sepalis obtusis, labello semitrilobo intus tricristato: lobo medio cristato, gynostemio villosiusculo." Blume sub Limodoro.*

*Limodorum flavum. Blume Bijdr. 375.*

*Hab. in sylvis elatis montis ignivomi Gede insulâ Javæ; Blume.*

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LXIV. CYTHERIS.

*Sepala patentia, subæqualia: lateralibus basi calcari adnatis; supremo cum petalis latioribus membranaceis parallelo, recurvo. Labellum posticum*

calcaratum, planum, trilobum, disco cristato. Columna brevis, alata, clavata. Anthera membranacea, bilocularis. Pollinia 8, æqualia. — Herba Indica terrestris, foliis planis petiolatis plicatis. Scapus terminalis. Flores minores.

1. *CYTHERIS cordifolia*. Lindl. in Wall. Cat. Herb. Ind. no. 3750.

Hab. in montes Sillet, Wallich. (hab. s. sp. e Museo Anglo-Indico.)

Herba spithamæa, caule tenui, vaginis laxis membranaceis vestito. Folia cordata, oblonga, acuminata, 5-plicata, longè petiolata. Bractæe lineares, acutæ. Calcar breve, clavatum, obtusissimum. Labellum oblongum, basi angustatum, lobis lateralibus intermedio . . . . . multò minoribus integris, medio lineis tribus approximatis elevatis subundulatis, apice liberis.

### LXV. CALLOSTYLIS.

*Callostylis*. Blume Bijdr. 340. tabellen 74.

Sepala erecto-patentia, lateralibus subtus connatis. Petala paulò angustiora. Labellum parvum, integrum, disco callosum, patens, irritabile, cum basi calloso incurvo columnæ articulatam. Columna incurva, clavata, libera. Anthera 2-locularis, loculis 4-locellatis. Pollinia 8, compressiuscula, caudiculis elasticis connata. — Herba epiphyta, caulescens. Caules radiciformes, pseudobolbophori. Folia rigida, lanceolata, obliquè retusa. Scapi terminales, spicato-multiflori.

Character ex Blume. .

1. *CALLÓSTYLIS rigida*. Blume l. c.

Hab. in sylvis altioribus montium Salak, Gede, Pantjar, Burangrang, insulæ Javæ; Blume.

### LXVI. ANIA.

Sepala et petala lineari-lanceolata, æqualia, conniventia. Labellum cum basi columnæ (nunc producta) in calcar v. saccum connatum, trilobum, planum, medio lamellatum. Columna alata, elongata, erecta. Anthera 6-8-locularis. Pollinia 8, quorum 4 in specie altera minora. — Herbæ (habitu Eulophiæ) epiphytæ, rhizomate repente. Folia plicata, membranacea, solitaria. Scapi multiflori.

Of the two species, of which this genus at present consists, one has the labellum completely calcarate, with no elongation of the base of the column; the other has it attached in a slight degree only to the elongated base, with which it forms a little sac; the latter has the pollen masses of equal size, and eight cavities in the anther for their reception; the former has two pair of the pollen masses much less than the others, and only 6 cells in the anther, of which four are for the four larger masses, and two for the two smaller pairs. In this respect *Ania* approaches *Ceratium* which is however very different in other respects.

1. *ANIA angustifolia*. Lindl. in Wall. Cat. Herb. Ind. no. 3740.

A. folio lanceolato petiolato scapi longitudine, labello calcarato apice tri-

lobo lobis lateralibus dentiformibus intermedio rhomboideo majore, lamellis disci tribus mediis continuis duabus lateralibus interruptis.

Hab. in *Tavoy, Wallich.* (*hab. s. sp. e Museo Anglo-Indico.*)

Pollinia 4 minora. Calcar breve, obtusum. Anthera 6-locularis. Scapus sesquipedalis. Petala cylindrum ferè formantia.

2. *ANIA latifolia.* *Lindl. in Wall. Cat. Herb. Ind. no. 3741.*

A. folio oblongo plicato scapo brevior, labello unguiculato cum basi producta columnæ in saccum connato trilobo: lobis lateralibus obtusis intermedio subrotundo-ovato acuto brevioribus, lamellis unguis tribus truncatis infra sinus loborum desinentibus lobi medii quinque denticulatis: lateralibus brevioribus.

Hab. in montibus *Sillet, Wallich.* (*hab. s. sp. e Museo Anglo-Indico.*)

Scapus bipedalis. Pollinia æqualia. Anthera 8-locularis. Petala subpatentia.

## LXVII. CERATIUM.

*Ceratium.* *Blume Bijdr. 341. tabellen 46.*

Sepala subringentia, lateralibus ungui columnæ obliquè insertis, erecto-patentibus. Petala breviora erecto-conniventia. Labellum concavum, intus cristatum, cum ungue columnæ articulatam, adscendens: limbo semitrilobo, undulato, fornicato. Anthera 4-locularis. Pollinia 8, quorum 4 obsoleta, caudiculis elasticis colligata. Capsula siliquæformis. —Herba epiphyta, caulescens. Caules simplices. Folia sessilia, lanceolata, coriacea. Spicæ oppositifoliæ, solitariæ. Flores bracteati.

Character ex Blume.

1. *CERATIUM compressum.* *Blume l. c.*

Hab. in sylvis primævis montium Gede et Salak insulæ *Javæ*; Blume.

## LXVIII. APATURIA.

Sepala patula, pubescentia, lateralibus nunc majoribus basi obliquis. Petala angustiora, patentia. Labellum unguiculatum, cum basi magis minusve producta columnæ articulatam, basi ventricosum, carnosum, apice trilobum, disco cristato. Columna teres, clavata, arcuata, clinandrio alato. Anthera 4-8-locularis. Pollinia 8. —Herbæ terrestres, aphyllæ. Scapi vaginis scariosis filamentosis vestiti. Bractææ membranacæ. Flores racemosi, penduli, pubescentes.

Trichotomæ proxima, habitu diversissimo et labello basi inflato distincta.

1. *APATURIA senilis.* *Lindl. in Wall. Cat. Herb. Ind. no. 3739.*

A. petalis lineari-oblongis: venis tribus distantibus, labelli lobis lateralibus subfalcatis, intermedio ovato undulato pauld longiore: lineis tribus glandulosis quarum laterales majores elevatæ ad apicem labelli secus marginem excurrunt.

Hab. in montibus *Sillet, Wallich*; in *Uligapur et Kalegung, Hamilton.* (*hab. s. sp. e Museo Anglo-Indico.*)

Scapus pedalis. Bractæ lanceolatæ. Sepala 5 lineas longa, ovato-oblonga, obtusa.

This resembles *A. Smithiana* in appearance so much as to be likely to be confounded with it. To the above characters which will I hope distinguish it, may be added the much less crowded racemes and larger flowers.

2. *APATURIA Smithiana*. *Lindl. in Wall. Cat. Herb. Ind. no. 3737.*

*A. petalis spatulatis unguiculatis in medio 3-veniis, labelli lobis lateralibus obtusis, intermedio subrotundo emarginato: lineis quinque elevatis undulatis in medio lobi medii clavatum desinentibus.*

*Hab. ad Kudjurea-ghaut, in regno Oude, Wallich. (hab. s. sp. e Museo Anglo-Indico.)*

Scapus sesquipedalis. Racemus multiflorus. Bractæ subulatæ longissimæ. Sepala 4 uncias longa, ovata, acuta, subæqualia.

3. *APATURIA Chinensis*.

*A. petalis lineari-oblongis univeniis, labello trilobo: lobis obtusis æqualibus intermedio apiculato, lineis disci 5 æqualibus crispatis intra apicem tantum lobi medii desinentibus.*

*Hab. in Chæna prope Macao, Reverendus Dominus G. H. Vachel. (hab. s. sp. commun. cel. Henslow.)*

Scapus pedalis. Sepala semunciam longa, ovata, acuta, patula. Petala longiora, patentissima. Pollen ignotum.

4. *APATURIA montana*. *Lindl. in Wall. Cat. Herb. Ind. no. 3738.*

*A. petalis linearibus univeniis, labelli lobis lateralibus acutis intermedio ovato concavo ciliato brevioribus, lineis 5 disci cristatis undulatis.*

*Hab. in summo monte Nuera Ellia, Zeylona, Macrae. (hab. s. sp.)*

Apicem scapi tantum vidi. Sepala semunciam longa; lateralibus duplò latiora. Labellum magis ventricosum et columna magis basi productum quam in cæteris. Pollen ignotum.

## LXIX. TRICHOTOSIA.

*Trichotosia. Blume Bijdr. 342. tabellen 11.*

Sepala pubescentia, lateralibus ungui columnæ adnatis, calcar mentientibus. Petala conformia, glabra. Labellum unguiculatum, ungui columnæ basi adnatum, limbo sublobato v. integerrimo. Columna basi longius producta. Anthera 2-locularis, loculis 4-partitis. Pollinia 8, ope materie elasticæ pulveræ cohærentia.—Herbæ epiphytæ, caulescentes, pilosiusculæ. Caules simplices. Folia sessilia, coriacea, v. subcarnosa. Pedunculi oppositifolii, solitarii, pauciflori. Flores bracteati.

Character ex Blume. An pollen rectè descriptum?

1. *TRICHOTOSIA microphylla. Blume.*

*T. "pubescens; foliis carnosis ovalibus acutis, pedunculo oppositifolio unifloro tribracteolato, labelli limbo patente obtuso integerrimo."*  
*Blume l. c.*

*Hab. in arboribus prope Tjitjalobak ad montem Salak, insulæ Javæ; Blume.*

2. *TRICHOTOSIA annulata*. *Blume*.

T. "caulibus ad insertionem foliorum pilis ferrugineis annulatis, foliis lineari-lanceolatis acuminatissimis glabriusculis, labelli limbo rotundato-patente." *Blume l. c.*

Hab. in sylvis altis ad montem Salak, insulæ *Javæ*; *Blume*.

Flores albidī, labelli limbo sulphureo, anthera atropurpurea; *Bl.*

3. *TRICHOTOSIA ferox*. *Blume*.

T. "rubro-pilosa; foliis lanceolatis, pedunculis flexuosis, labelli limbo patente, bilobo." *Blume l. c.*

Hab. in sylvis opacis montis Salak, insulæ *Javæ*; *Blume*.

4. *TRICHOTOSIA pauciflora*. *Blume*.

T. "pubescens, foliis lanceolatis, pedunculis paucifloris, labelli limbo erecto emarginato." *Blume l. c. tab. 11.*

Hab. in arboribus ad montem Pantjar, insulæ *Javæ*; *Blume*.

LXX. *TAINIA*.

*Tainia*. *Blume Bijdr. 354. tabellen 48.*

Sepala ringentia, acuminatissima, lateralibus labello suppositis ungui columnæ adnatis. Petala conformia. Labellum columnā articulatū, indivisum, acuminatum, intus lineatum, sepalis minus. Columna semiteres, basi producta. Anthera subcarnosa, incompletè 8-locularis. Pollinia 8, ope materie pulvereæ elasticæ cohærentes.—Herba terrestris, glabra, caulibus radicanibus. Folia membranacea, plicata, longè petiolata, petiolis basi bulboso-tumidis. Scapus lateralis spicato-multiflorus.

Character ex *Blume*. An pollen rectè descriptum?

1. *TAINIA speciosa*. *Blume l. c.*

Hab. in umbrosis montis Salak, insulæ *Javæ*; *Blume*.

LXXI. *PLOCOGLOTTIS*.

*Plocoglottis*. *Blume Bijdragen 380. tabellen 21.*

Flores ringentes. Sepala majora, lateralibus sub labello infernè connatis. Petala apice incurva. Labellum basi utrinque cum plicis membranaceis inflexis columnæ connatum; limbo convexo indiviso patente demum erecto. Columna supernè libera. Anthera bilocularis. Pollinia 4, rotunda, caudiculis duabus longis replicatis.—Herba terrestris. Folia in petiolo tumido solitaria, oblongo-lanceolata, plicata. Scapus radicalis, erectus, multiflorus. Flores pedicellati, bracteolati.

Character ex *Blume*.

1. *PLOCOGLOTTIS Javanica*. *Blume l. c.*

Hab. locis umbrosis et humidis ad pedes montium Salak, Pantjar, &c. insulæ *Javæ*; *Blume*.

NOTE. The total number of Orchideous plants belonging to the Tribe Epidendræ is as follows ;

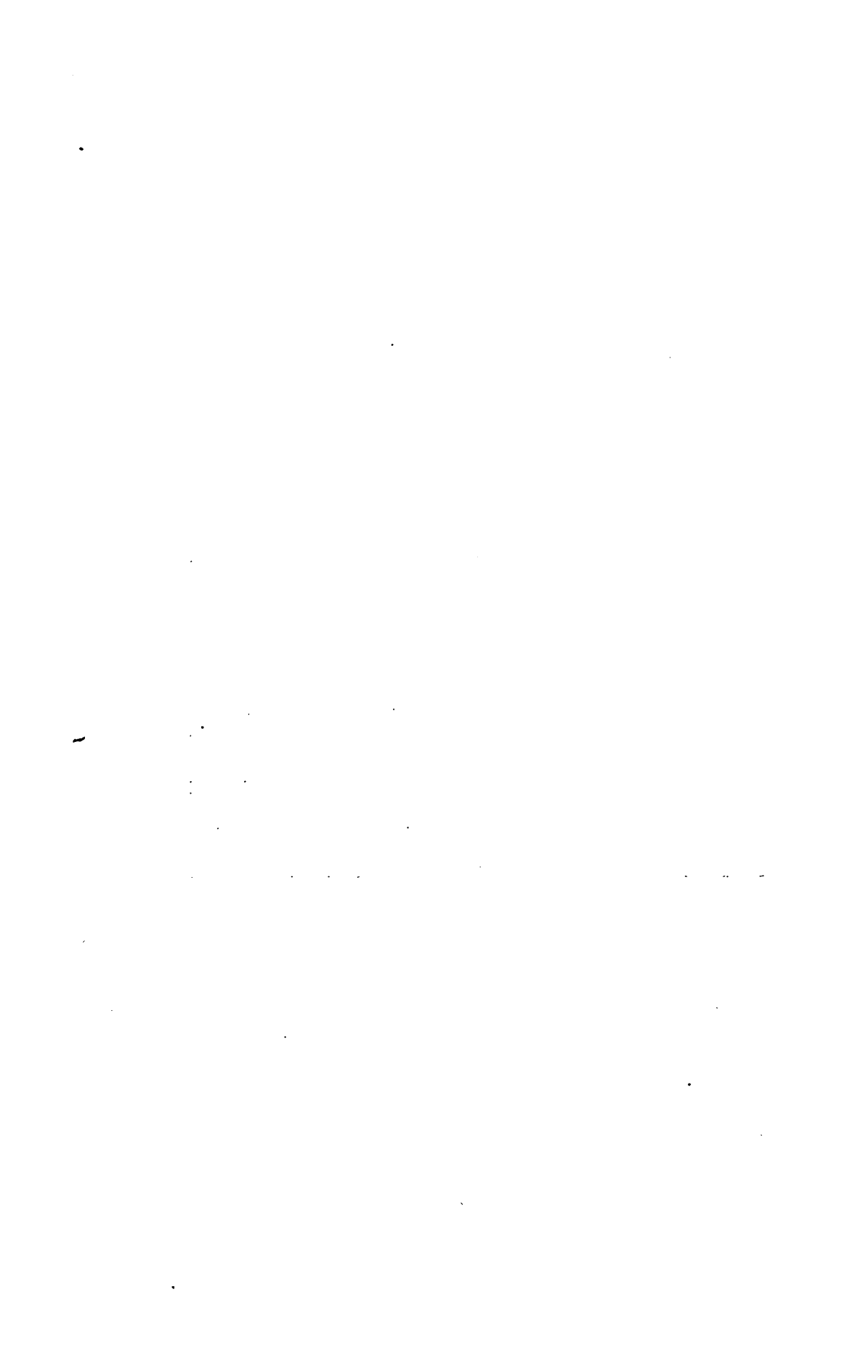
Described 149  
Doubtful 4

Total 153

Their geographical arrangement is thus :

Names of the Genera.	Europe.	Siberia and Northern Asia.	North America.	Northern India and Nipal.	Continent of India.	Ceylon.	Indian Archipelago.	China.	Japan.	New Holland.	South Sea Islands.	America within the tropics.	South America beyond the tropic.	South Africa.	Mauritius, &c.	Africa within the tropics.	North Africa.
48. Collabium . . . . .	.	.	.	.	.	.	1	.	.	.	.	7	.	.	.	.	.
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50. Dinema . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
51. Encyclia . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
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55. Lailia . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
56. Cattleya . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
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60. Bletia . . . . .	.	.	1	1	.	.	1	1	1	.	.	1	.	.	1	.	.
61. Ipsea . . . . .	.	.	.	.	.	.	1	.	.	.	.	1	.	.	.	.	.
62. Arundina . . . . .	.	.	.	.	.	.	1	1	1	.	.	1	.	.	.	.	.
63. Phaius . . . . .	.	.	.	.	1	1	1	1	1	.	.	1	.	.	.	.	.
64. Cytheris . . . . .	.	.	.	1	.	.	1	.	.	.	.	1	.	.	.	.	.
65. Callostylis . . . . .	.	.	.	.	.	.	1	.	.	.	.	1	.	.	.	.	.
66. Ania . . . . .	.	.	.	1	1	.	1	.	.	.	.	1	.	.	.	.	.
67. Ceratium . . . . .	.	.	.	.	.	1	1	.	.	.	.	1	.	.	.	.	.
68. Apaturia . . . . .	.	.	.	.	.	.	1	1	.	.	.	1	.	.	.	.	.
69. Trichotosia . . . . .	.	.	.	.	1	.	1	.	.	.	.	1	.	.	.	.	.
70. Tainia . . . . .	.	.	.	.	.	.	1	.	.	.	.	1	.	.	.	.	.
71. Plocoglottis . . . . .	.	.	.	.	.	.	1	.	.	.	.	1	.	.	.	.	.
Total	.	.	3	8	5	4	16	4	1	.	.	113	.	.	3	.	.





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THE  
GENERA AND SPECIES  
OF  
ORCHIDEOUS PLANTS.

BY JOHN LINDLEY, Ph. D. F. R. S. L. S. G. S.

*Member of the Imperial Academy Naturæ Curiosorum, of the Botanical Society of  
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It is again the pleasing duty of the Author to express his acknowledgements for additional materials which the liberality of his Friends and Correspondents has placed at his disposal. He has to thank

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Professor **TINEO**, for a similar important series.

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Very unfortunately the greater part of the above communications did not reach the Author in time to be incorporated in the present part; the numerous new species they contain will be published in a Supplement.





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*nervosa*, Thunb. 26  
*paludosa*, L. 24  
*paludosa*, Fl. Dan. 28  
*salassia*, Commers. 28  
*squamata*, Forst. 186





# ORCHIDEÆ.

## Tribe III. VANDEÆ.

ORCHIDÆ, Tribus VANDEÆ. *Lindl. Orch. Scoletos.*

Pollen in massas cereaceas (pollinia) definitas cohærens, sub anthesi lamellæ elasticæ (caudiculæ) et glandulæ stigmatis agglutinatas. Anthera terminalis, rarè dorsalis, opercularis. Herbæ epiphytæ v. terrestres, nunc (præsertim in Americanis) pseudobulbis oligophyllis gaudentes, nunc (præsertim in Asiaticis) caulescentes; ferè omnes intra tropicos provenientes.

The presence of the elastic or transparent strap called caudicula, which separates along with the gland of the stigma about the period of impregnation, and forms a strict adhesion with the pollen masses, forms the distinctive character of this tribe. In Epidendræ the caudicula is present, but in neither those nor in Malaxidæ, the only tribes with which Vandæ can be easily confounded, is there any separation of the gland from the stigma. In some genera of Vandæ such as Cymbidium, there is no distinction between the caudicula and the gland; but the spontaneous separation of the latter sufficiently indicates the real affinity of such genera. Through Calanthe we have a direct passage from Vandæ to Ophrydæ.

It is probable that this very extensive tribe is susceptible of subdivision into several tolerably well defined groups, of which Maxillaria, Cymbidium, Eulophia, Masdevallia, Oncidium, Aerides, and Calanthe might be taken as the types. But it would be premature to attempt such a subdivision in the absence of more precise knowledge of the structure of a great number of species. I therefore propose, in the mean while, the following artificial table, as a ready means of analysing such genera as I am at present acquainted with.

### ARTIFICIAL ANALYSIS OF THE GENERA.

#### A. Pollinia 2, integra, v. sulcata, v. altè biloba; v. 4.

##### 1. § Caudiculæ 2.

Sepala lateralibus basi in calcar spurium connata.	-	-	154. PODOCHILUS.
Sepala libera, basi non producta, spatulata unguic. Petala lobata. Labellum 4 partitum.	-	-	160. CRYPTOPUS.
sessilia.			
Labellum cum ung. product. columnæ artic.			
Unguis columnæ calcarat.	-	-	159. AERANTHES.
Unguis columnæ mutica.	-	-	82. BIFRENNARIA.

Dec. 1832.

T

Labellum sessile, calcaratum.	-	-	-	-	161. CEONIA.
basi saccatum, integrum.	-	-	-	-	111. DIPODIUM.
trilobum.	-	-	-	-	133. TETRAPELTIS.
basi planum, trilobum anticum. Glandulæ 2.	-	-	-	-	106. CHELONANTHERA.
indivisum posticum. Gland. 1.	-	-	-	-	108. SUNIFIA.

## 2. § Caudicula 1.

\* *Calcaratæ; cornutæ; v. saccatæ.*

1. Labellum cum columna altè connatum.  
 Sepala reflexa, petalis alaeform. patent. longè minora. - 116. LISSOCHILUS.  
 Sepala et petala subæqualia.  
 Sepala lateralìa labello adnata. - - 140. MICROSACCUS.  
 Sepala omnia libera.  
 Labellum utroque margine cornutum. - - 135. TRICHOGLOTTIS.  
 Labellum muticum bilobum. Col. alata. - 107. ACANTHOGLOSSUM.
2. Labellum sessile, liberum; v. cum columna parum connatum.  
 Sepala lateralìa connata, labello supposita. - - 121. RODRIGUEZIA.  
 Sepala omnia libera.  
 Labellum basi tantum saccatum, (v. si leviter cornutum carnosissimum, sepalis  
 [æquale v. majus),  
 cum columna continuum, integrum v. leviter lobatum,  
 planum. Perianth. expl. carnosum. Anth. valv.  
 persist.  
 Calcar labelli unicum. - - 137. VANDA.  
 Calcaria labelli duo. - - 139. DIPLOCENTRUM.  
 cucullatum. Perianth. claus. membr. Anth. } 102. GEODORUM.  
 valv. decidue. }  
 cum columna parallelum medio reflexum. Peri- }  
 anth. clausum. - - } 120. JONOPSIS.  
 cum col. articul. 3-lob. sepalis linearibus difformi- }  
 bus multò brevius. - - } 138. RENANTHERA.
- Labellum calcaratum.  
 Calcar ventr. 1-loc. limbo integro, v. obsoleto, v. leviter lobato,  
 fauce apertâ,  
 vacuum.  
 Sepala omnia libera. - - 144. SACCOLABIUM.  
 Sep. lat. basi connata. - - 145. TENIOPHYLLUM.  
 intus dente dorsali auctum. - - 146. CLEISOSTOMA.  
 fauce marg. inflexo clausâ, biglandulosâ. - 151. CERATOCHILUS.  
 Calc. ventr. 1-loc. limbo lobato. - - 152. ECHIOGLOSSUM.  
 Calc. ventr. 2-loculare. - - 153. SARCANTHUS.  
 Calc. cornutum.  
 Col. anticè bicirrhosa. - - 158. SCHÆNORCHIS.  
 Col. mutica.  
 Labellum indiv. carnos. petalis multò latius } 162. ANGRÆCUM.  
 Perianth. expl. - - }  
 Labellum lobatum (sæpius cucullatum).  
 Poll. 2. Epiphyta. - - 156. CECROCLADES.  
 Poll. 4. Terrestis. - - 165. TIPULARIA.
3. Labellum liberum basi (sæpius longè) productæ columnæ affixum.  
 Sepala et petala æqualiter patentia. - - 157. AERIDES.  
 Sepala et petala secunda.  
 Labellum basi infundibuliforme, cucullatum, indivisum 112. GALEANDRA.  
 Labellum basi cornutum, v. brevius calcaratum, lobatum 110. EULOPHIA.

\*\* *Ecalcarata*; nempè nec sacco nec calcare ullo pone basin labelli.

1. *Labelium cum columna connatum.*
  - Sepala lateralìa invicem libera,*
  - labello basi adnata.* - - - 72. *NANODES.*
  - supremum basi petalis adnatum.* - - - 73. *ASPASIA.*
  - Sepala lateralìa connata.*
  - Petala cum sepalo supremo connat.* - - - 76. *TRIZEUXIS.*
  - Petala libera. Columna anticè bicorn.* - - - 75. *ACRIOPSIS.*
  - Sepala omnia libera (conniventia).* - - - 74. *ORNITHIDIUM.*
2. *Labelium liberum sessile, v. subsessile.*
  - Sepala omnia connata.* - - - 118. *MASDEVALLIA.*
  - Sepala lateralìa magis minùse connata.*
  - Perianth. globos. Lab. 3-lob. medio articul.* - - 95. *PERISTERIA.*
  - Perianthium patens.*
  - Sepala lateralìa obl. calcar referentia.* - - - 85. *ALAMANIA.*
  - Sep. lat. subæquilatera.*
  - Anth. dorsalis. Col. aptera.* - - - 117. *NOTYLIA.*
  - Anth. terminalis.*
  - Col. biaurita.* - - - *bis* 125. *ONCIDIUM.*
  - Col. aptera.*
  - Lab. apice 1-cameratum, cum sepalis*
  - longè connatum.* - - - 141. *CAMAROTIS.*
  - Lab. apice saccatum, sepalis ferè liberum.* 143. *MICROPERA.*
- Sepala omnia libera.*
- Labell. petalis conforme.* - - - 101. *TRICHOCEROS.*
- Labell. petalis difforme.*
- Columna alata, v. aurita;*
- apice aurita.* - - - 122. *MACRADENIA.*
- utrinque aurita.*
- Pollinia cava.* - - - 125. *ONCIDIUM.*
- Pollinia solida.* - - - 126. *FERNANDEZIA.*
- petaloidea.*
- Lab. ventricosum.* - - - 109. *CALYPSO.*
- Lab. planum.* - - - 127. *PACHYPHYLLUM.*
- versus apicem alato-marginata.*
- Lab. cum ungue tuberculato continuum.* 130. *CYRTOCHILUM*
- Lab. medio constrictum, hypochilio cavo.* 91. *STANHOPEA.*
- Columna aptera.*
- Poll. 4, distincta.*
- Flores aperti. Rostellum longissimum.* 77. *ORNITHOCEPHALUS.*
- Flores cylindracei.* - - - 99. *CREMASTRA.*
- Poll. 2, solida, fissa. v. 2-partita.*
- Columna bicirrhusa.*
- Labelium ventricosum carnosum posticum.* 89. *CATASETUM.*
- Labell. explanatum petaloideum anticum.* 88. *MYANTHUS.*
- Col. mutica.*
- Perianth. connivens.*
- Lab. cucull. membranac. columnâ*
- contin.* - - - (bis) 102. *GEODORUM.*
- Lab. plan. carnosum,*
- petalis conforme.* - - - 83. *DICRYPTA.*
- petalis difforme.* - - - 155. *ADENONCOS.*
- Perianth. explanatum.*
- Columna teres 1-cornis.* - - - 136. *TELIPOGON.*
- Col. semiteres, mutica.*
- Poll. longè distantia.* - - - 100. *GRAMMATOPHYLLUM.*
- Poll. basi contigua.*
- Labell. plan. integr. 1-callos.* 129. *PHYMATIDIUM.*
- Lab. plan. integ. ecallosum.* 132. *BRASSIA.*
- Labell. cucullatum,*
- columnam involvens.* - - - 103. *SOBRALIA.*
- columnâ parall. antic.*
- Poll. 2, posticè fissa.* 97. *CYMBIDIUM.*
- Poll. 2, cava, convoluta; Labell. apice*
- saccatum.* - - - 98. *ACROPERA.*
- Labell. ventricos. posticum*
- indivisum.* - - - 90. *MONACHANTHUS.*

3. *Labellum liberum, c. basi producta columnæ articulatam; v. longè unguiculatam.*  
*Sepala lateralìa basi producta, columnâ v. invicem connata;*  
*omnia connata.* - - - 148. *CRYPTOGLOTTIS.*  
*supremum liberum.*  
*Lab. cucullat. v. ventric.*  
*Sepala secunda.* - - - 115. *CYRTOPERA.*  
*Sepala æqualiter patentia.*  
*Lab. c. columnæ articulatam.*  
*Poll. incumbentia ♂♂.* - - 86. *MAXILLARIA.*  
*Poll. collateralia oo oo.* - - 96. *EUCNEMIS.*  
*Lab. c. columnæ continuum.* - - 79. *SARCOCHILUS.*  
*Lab. planum, v. tantum canaliculatam.*  
*patentissimum.*  
*Poll. 4. Pet. sepalis angustiora.* - 86. *PSITTACOGLOSSUM.*  
*Poll. 2. Pet. sepalis latiora falcata.* - 87. *CYCNOCES.*  
*in columnam incumbens.*  
*Col. 2-cornuta.* - - - 150. *EPHIPPIUM.*  
*Col. mutica.*  
*Lab. hastat. longè unguiculatam.* - 105. *DORITIS.*  
*Lab. scasile,*  
*bilobum.* - - - 142. *CHILOSCHISTA.*  
*subtrilobum.* - - - 84. *GOVENIA.*  
*lateralìa libera;*  
*supr. et pet. columnâ connat.* - - 92. *GONGORA.*  
*supremum liberum.*  
*Stigma verticale. Anth. dorsal.* - 78. *CIRRHEA.*  
*Stigma terminale. Anth. term.*  
*Pet. sepalis multò majora.* - - 134. *PHALENOPSIS.*  
*Pet. sepalis subæqualia.*  
*Clinandr. cucull. anth. includens.* - 123. *CRYPTARRHENA.*  
*Clin. immarginatam.*  
*Lab. cucull. 2-lob. ungue nudo.* - 94. *ANGULOA.*  
*Lab. galeat. ungue appendice pocu-*  
*liformi incluso.* } 93. *CORYANTHES.*  
*Lab. planum.*  
*Perianth. clausum. Lab. trian-*  
*gulare.* } 128. *DICHEA.*  
*Perianth. explan.*  
*Lab. indivis. laminâ patente basi cristatâ.*  
*Perianth. æqualiter patens.* 131. *ODONTOGLOSSUM.*  
*Perianthium secundum.* - 113. *ZYGOPETALUM.*  
*Lab. 3-partit. c. basi product.*  
*columnæ continuum.* } 114. *CYRTOPODIUM.*  
*Lab. flabelliforme; columnâ*  
*aurita.* } 124. *CUITLAUZINA.*

B. *Pollinia* 8.

- Labellum c. columnâ connatam.*  
*Sep. et pet. inæq. Labellum medio constrictum.* - 163. *AGROSTOPHYLLUM.*  
*Sep. et pet. subæq. Labell. continuum.* - - 164. *CALANTHE.*  
*Labellum liberum,*  
*calcaratum.* - - - 166. *LIMATODES.*  
*ecalcaratum; v. leviter saccatum.*  
*Sepala in tubum connata.* - - 119. *CRYPTOCHILUS.*  
*Sepala basi tantum connata.*  
*Columna basi in unguem producta.* - - 149. *CERATOSTYLIS.*  
*Col. c. labello parallelâ.* - - 168. *THELASIS.*  
*Sepala omninò libera, v. levissimè connata.*  
*Col. basi producta.*  
*Perianth. tubulosum, ventricosum, fauce con-*  
*strictum.* } 104. *ACANTHOPHIPPIUM.*  
*Per. non tubulosum.*  
*Lab. ecalcaratum.* - - - 147. *APPENDICULA.*  
*Lab. calcaratum.* - - - 81. *ARPOPHYLLUM.*  
*Col. non basi producta.* - - - 169. *GLOMERA.*

## LXXII. NANODES.

*Nanodes.* Lindl. in *Bot. Reg.* t. 1541.

*Perianthium ringens.* Sepalum supremum fornicatum; lateralibus labello supposita eoque basi connata. Petala sepalis lateralibus conformia iisque subparallela, libera. Labellum carnosum, indivisum, cum columna connatum (more *Epidendri*). Columna ad utrumque marginem clinandrii alata. Anthera 2-locularis, rostrata. Pollinia 4, compressa, collateralia, in glandulam ovatam sessilia.——Epiphyta humilis, cæspitosa, caulescens. Folia coriacea, disticha, vaginantia, approximata. Flores discolores, in apice caulium sessiles, solitarii.

1. *NANODES discolor.* Lindl. l. c.

Hab. in *Brazilia*, in sylvis prope Rio Janeiro. (v. v. c.)

Caules aggregati, 2-3 pollices alti, simplices, densè foliosi, nihil bulbosi. Folia ovato-oblonga, emarginata, basi amplexicaulia et vaginantia, internodiis duplè longiora, viridi-purpurea. Flores solitarii, sessiles, terminales, obscurè purpurei, inter folia immersi. Sepalum supremum ascendens, lineari-oblongum, convexum; petala declinata, cum sepalis lateralibus labello suppositis parallela. Labellum carnosum, ovatum, minutissimè crenulatum.

## LXXIII. ASPASIA.

*Aspasia.* Lindl. in *Hook. Bot. Misc. ined.*

*Perianthium patens, æquale.* Sepala lateralibus libera; supremum cum petalis basi connatum. Labellum oblongum, concavum, ecalcaratum, obsoletè 4-lobum, cum columna semi-connatum. Columna labello parallela, semiteres, marginata. Anthera . . . Pollinia 2, pyriformia, posticè sulcata, caudiculâ planâ cuneatâ, glandulâ parvâ.——Herbæ epiphytæ, caulescentes, pseudobulbosæ. Folia subcoriacea. Spicæ radicales, breves. Flores mediocres.

1. *ASPASIA epidendroides.* Lindl. l. c.

Hab. in *Panama* et *Columbia occidentali*, Cuming. (no. 1297.) (*hab. s. sp.*)

Pseudobulbi 1-2-phylli, compressi, dipteri. Folia pedalia. Racemi e basi pseudobulborum, quibus sunt paulò longiores.

## LXXIV. ORNITHIDIUM.

*Ornithidium.* Salisb. in *Hort. Trans.* 1. 293.

*Perianthium clausum, liberum, æquale.* Labellum cum basi columnæ connatum, cucullatum, disco callosum. Columna labello parallela, tertiūscula, rostello brevissimo. Anthera bilocularis. Pollinia 2, bipartibilia, lobis incumbentibus; in glandulam parvam triangularem sessilia.——Herba epiphyta, caulescens. Caules ramosi, pseudobulbos axillares gerentes. Folia subcoriacea. Racemi sessiles, axillares, effusi.

1. *Ornithidium coccineum*, *Salisb. l. c.*

*Helleborine coccinea multiflora*. *Plum. sp. 9. ic. 180. f. 1.*

*Epidendrum coccineum*. *Linn. sp. pl. 1348. Jacq. Amer. 222. t. 135.*

*Cymbidium coccineum*. *Swartz. Nov. Act. Ups. 6. 70. Willd. 4. 94. Bot. Mag. t. 1437.*

*Ornith. coccineum*. *Hort. Kew. ed. 2. 5. 210. Hooker. Esot. Fl. t. 38.*

**Hab.** in sylvis *Martinica* humidis, præcipuè ad torrentes, Jacquin; *St. Vincentii*, *Guilding. (v. v. c. et hab. s. sp. comm. cel. Hooker.)*

Flores in axillis foliorum fasciculati, exserti, nutantes. Pedunculi ad nodos bracteoliferi. Bractæ membranaceæ, vaginantes. Ovarium obscure costatum. Perianthium roseum, connivens; sepala ovata, acuminata; petala conformia, minora. Labellum columnæ appressum, ungue concavo; cum basi columnæ cava nectarifera connatum, sursum dilatatum in laminam ovato-lanceolatam, subundulatam, patentem, in medio columnæ proximo verrucam magnam luteam gerentem. Columna petalis brevior, basi anticè gibbosa, intensè lutea. Stigma concavum infra apicem columnæ. Anthera opercularis, decidua, apiculata, dorso cristata, septo incompleto. Pollinis massæ quatuor, geminatæ, cereaceæ, in vertice columnæ incumbentes, caudiculæ planæ cum glandula in margine anteriore stigmatis cohærente adnatæ.

## LXXV. ACRIOPSIS.

*Acriopsis*. *Blume Bijdr. 376. tabellen 71. Reinwardt in Bot. Zeitung, 1825, v. 2. p. 4.*

Perianthium patulum, tetraphyllum, petalis sepalisque subæqualibus. Labellum basi columnæ in tubum connatum, limbo patente cordato cristato. Columna erecta, cornubus duobus porrectis apice glandulosis. Anthera bilocularis, intra clinandrium fornicatum abscondita. Pollinia 2, fusiformia, caudiculâ filiformi, glandulâ parvâ subrotundâ.—Herba epiphyta. Folia pseudobulbis insidentia, lineari-lanceolata, obtusa. Pedunculi radicales, paniculati. Flores pedicellati.

**Character ex Blume.**

1. *ACRIOPSIS Javanica*. *Blume, l. c. Reinw. l. c.*

**Hab.** in arboribus montium *Javæ* occidentalis; *Blume.*

## LXXVI. TRIZEUXIS.

*Trizeuxis*. *Lindl. collect. bot. t. 2.*

Perianthium globosum. Sepala lateralia connata, labello supposita; superum cum petalis conformibus basi connatum. Labellum posticum, basi levissimè columnæ connatum, integrum, concavum, acutum. Columna labello parallela, teres, clavata, stigmatè longitudinali. Anthera 1-locularis, carnosa. Pollinia 2, basi discreta, solida, caudiculâ maximâ oblongâ, glandulâ parvâ ovali.—Epiphyta parva, acaulis. Folia falcata, disticha. Scapi paniculati. Flores aggregati, minuti.

1. *TRIZEUXIS falcata*. *Lindl. l. c. Hooker, Exot. Fl. t. 126.*

**Hab.** supra arbores in *India occidentali*. (*v. v. c.*)

## LXXVII. ORNITHOCEPHALUS.

*Ornithocephalus. Hooker, Exot. Flora, t. 127. (1825.)*

Perianthium patens. Sepala obtusa, lateralia reflexa, supremum fornicatum. Petala conformia, incurva. Labellum posticum, ealcaratum, unguiculatum, acuminatissimum, sepalis longius. Columna brevis, aptera, rostello longissimo subulato. Anthera 4-locularis, rostello conformis. Pollinia 4, solida, cruciatim caudiculæ longissimæ subulatæ affixa; glandula parva, ovalis.—Herba epiphyta, acaulis. Folia equitantia, carnosa. Spica axillaris. Bractæ amplexicaules. Flores inconspicui.

1. *ORNITHOCEPHALUS gladiatus. Hooker, l. c.*

Hab. in insulâ *Trinitatis*, De Schack.

## LXXVIII. CIRRHÆA.

*Cirrhæa. Lindl. in Bot. Reg. 930 et 1538.*

Perianthium patens. Sepala libera, æqualia. Petala multò angustiora, linearia, flexuosa. Labellum longè unguiculatum, columnâ continuum, tripartitum; laciniis angustis intermediâ minore. Columna erecta, clavata, teres, stigmate subquadrato, horizontali! rostello cirrhato. Anthera dorsalis! membranacea, sub-unilocularis. Pollinia 2, parallela, oblonga, compressa, elasticè prosilientia, caudiculâ brevi corneâ, glandulâ incurvâ.—Herbæ epiphytæ, pseudo-bulbosæ. Folia plicata. Racemi penduli, multiflori, radicales. Flores maculati.

1. *CIRRHÆA Loddigesii. Lindl. in Bot. Reg. t. 1538.*

C. foliis oblongo-lanceolatis utrinque acuminatis, petalis linearibus flexuosis, labelli lobo medio lineari-spatulato lateralibus acutis.

*Cymbidium dependens. Lodd. Bot. Cab.*

Hab. verosimiliter in *Brazilid*; nec Chinâ ut aiunt Hortulani. (v. v. c.)

Pseudo-bulbi ovati, costati, 1-2½ poll. longi, sæpiùs nudi. Folia solitaria, pedalia, oblongo-lanceolata, utrinque acuminata, costis 7 subæqualibus. Racemi radicales, penduli, multiflori, foliis breviores. Sepala oblonga, obtusa, æqualia, et tali modo patentia ut triangulum æquilaterum efficiunt; apice maculata. Petala linearia, flexuosa, basi cum sepalo supremo parallela. Labellum ungue longo tereti, lobis lateralibus acuminatis, erectis, intermedio lineari-spatulato obtuso duplò brevior. Columna libera, arcuata, teres, clavata, apice truncata et stigmatifera. Stigma subhorizontale, obliquum; rostello subulato, elongato, cirrhoso. Anthera postica, opercularis, unilocularis, decidua, in clinandrio dorsali incumbens, valvis membranaceis involutis. Pollinia 2, cereacea, parallela, oblonga, compressa, elasticè prosilientia, glandulæ unicæ affixa.

2. *CIRRHÆA viridipurpurea. Lindl. l. c.*

C. foliis oblongo-lanceolatis, petalis linearibus arcuatis, labelli lobo medio acuminato lateralibus æquali.

*Gongora viridi-purpurea. Hooker in Bot. Mag. t. 2978.*

Hab. in *Brazilid*, supra arbores in sylvis ad sinum Botofogo.

Sepala extùs lætè viridia, intùs vitellina purpureo-maculata.



3. *CIRRHÆA* fusco-luten. *Lindl. l. c.*

*C. foliis lanceolatis acuminatis, petalis lineari-lanceolatis, labelli lobo medio ovato lateralibus obtusis.*

Hab. supra arbores *Brazilæ* ad Corcovado (*exam. s. sp. et v. ic. pict. in herb. Hooker.*)

This very much resembles *C. Loddigesii*; but the flowers are twice as large, the sepals are dusky brown, with a few reddish lines, and the petals greenish yellow; while all the parts are destitute of spots except the middle lobe of the labellum.

## LXXIX. SARCOCHILUS.

*Sarcophilus. R. Brown, Prodr. 332.*

Perianthium patens. Sepala lateralibus cum ungue labelli subdors connata. Petala conformia. Labellum posticum, ecalcaratum, cum ungue columnæ continuum, calceiforme; lobo intermedio carnosissimo, solido. Columna. . . . . Anthera. . . . . Pollinia 2, in glandulam deltoideam sessilia. — Epiphyta acaulis, v. brevissimè caulescens. Folia disticha, lineari-lanceolata, falcata. Racemi axillares, erecti, 5-6 flori, secundi. Bractæ breves, latæ, ovatæ. Flores speciosi.

I have been scarcely able to ascertain any thing satisfactory as to the structure of the Pollen masses. They appeared, in the only specimen I examined, to be like those of *Cymbidium*.

1. *SARCOCHILUS* falcatus. *R. Br. l. c.*

Hab. in *Novd Hollandid*, ad Hunters River et Newcastle, *Brown*, (*hab. s. sp. comm. cel. Brown.*)

## LXXX. MAXILLARIA.

[ *Maxillaria. Fl. Peruv. Prodr. 116. t. 25. syst. 219. Xylobium. Lindl. Bot. Reg. 897. Colax. Ib. eod. loc. (nomen postea mutatum.)*

Perianthium connivens, rarè patens. Sepala lateralibus cum basi productâ, columnæ connata. Petala subconformia. Labellum trilobum, cucullatum, sessile, cum basi productâ columnæ articulatum. Columna semiteres, aptera. Anthera subbilocularis. Pollinia 2, bipartibilia v. integra, caudiculâ brevi, glandulâ transversâ. — Epiphytæ, (Americanae) pseudobulbosæ, acaules, v. caulescentes. Folia plicata, v. coriacea. Pedunculi radicales, axillares v. terminales, uni v. multiflori.

The species of this genus may be separated into the following subdivisions.

§ 1. *Axillifloræ*. Pedunculi axillares. (EUMAXILLARIA.)§ 2. *Scapigeræ*. Pedunculi radicales.

a. Labellum anticum. (COLAX.)

b. Labellum posticum. (XYLOBIUM.)

§ 3. *Spathacæ*. Pedunculi terminales, e spatha vaginante erumpentes. (NOTHIUM.)§ 1. *Axillifloræ*. Pedunculi axillares. (EUMAXILLARIA.) Sp. 1—16.1. *MAXILLARIA* platypetala. *Fl. Peruv. Syst. p. 221.*

*M. caule folioso axillis pseudobulbiferis, pseudobulbis oblongis 1-2phyllis,*

foliis oblongis obtusis nunc emarginatis coriaceis, floribus solitariis axillaribus, pedunculis vaginatis pseudobulbis longioribus, sepalis patulis oblongis rotundatis lateralibus basi connatis, petalis conformibus duplò minoribus, labello oblongo concavo obtuso tuberculo oblongo truncato in medio.

Hab. in *Peruviz* montibus nemorosis ad *Muña* et *Chaclla* vicos, Ruiz et Pavon; ad *Camino real* alt. 6000 ped. Hall (*hab. s. sp. comm. cel. Hooker*).

Surculi juniores imbricati, *Fernandeziz* *elegantis* facie. Folia 3-4 poll. longa, 9-10 lin. lata. Sepala guttata. Petala verosimiliter immaculata.

2. *MAXILLARIA ochroleuca*. Loddiges Bot. Cab. ined.

*M. pseudobulbis* oblongis compressis diphyllis, foliis ensiformibus strictis, floribus fasciculatis radicalibus pseudobulbis brevioribus, sepalis lineari-lanceolatis acuminatissimis, labello duplò brevioris cucullato medio calloso trilobo: lobis lateralibus membranaceis subundulatis obtusis intermedio oblongo carnosio recurvo.

Hab. in *Brazilia*, prope Rio Janeiro, Loddiges (v. v. c.)

Bractez longæ membranaceæ acuminatæ. Flores albi, odorati. Sepala lineari-lanceolata, acuminatissima, lateralibus basi parùm obliquis, cum ungue producto columnæ cornu breve obtusum formantibus. Petala æquilonga, conformia. Labellum sepalis duplò brevius, cum columna parallelum, cucullatum, trilobum; lobis lateralibus membranaceis apice ovatis obtusis subundulatis porrectis, intermedio longiore oblongo carnosio convexo recurvo subcrispo; callo magno lævi omnem axin labelli lobo intermedio excepto occupante. Columna clavata marginata. Anthera membranacea, unilocularis. Pollinia 4, per paria inæqualia in glandulam lunatam sessilia, incumbentia (♂♂).

3. *MAXILLARIA longipetala*. Fl. Peruv. Syst. p. 22.

*M. pseudobulbis* . . . . ., foliis ligulatis apice tridentatis basi vaginantibus, pedunculis vaginatis axillaribus unifloris, petalis sepalisque linearibus acuminatis conniventibus, labello triplo minore trilobo: lobo intermedio angusto oblongo acuto margine crispo apice acutiusculo.

Hab. in *Peruviz* nemoribus Pillao, Acomayo et Pati supra saxa et arbores, Ruiz et Pavon (*exam. s. sp. in herb. Lambert.*)

Folium 8 poll. longum, retusum, dentibus apicis lateralibus sæpè rotundatis v. oblitteratis. Superficiem labelli haud observare licuit.

4. *MAXILLARIA alba*.

*M. caule folioso axillis pseudobulbiferis*, foliis 1-3 ligulatis acutis coriaceis aveniis, floribus solitariis axillaribus erectis, sepalis patulis ovato-lanceolatis obtusiusculis: lateralibus basi connatis, petalis conformibus, labello oblongo obtuso tuberculo oblongo carnosio in medio.

*Dendrobium album*. Hooker Exot. Fl. t. 142.

*Broughtonia alba*. Spreng. Syst. 3. 735.

Hab. in *Jamaica*; Hooker; in *Cayenna*, Lamarck. (v. s. sp. in herb. Vahl.)

Planta verosimiliter epiphyta, *Ornithidii* facie. Flores candidi. Ovarium longissimum, rectum. *M. platypetalæ* affinis, foliis longis ligulatis sepalisque angustioribus præcipuè diversa.

5. *MAXILLARIA undulata*. Fl. Peruv. Syst. 221.

*M. "bulbis ovato-oblongis striatis, foliis lanceolatis 5-7-nerviis, scapo brevi racemoso."*

Dec. 1832.

Hab. in nemoribus *Chinchao* et *Muña* supra arbores et saxa ; floret Augusto et Septembri ; Ruiz et Pavon.

6. *MAXILLARIA variegata.* *Fl. Peruv. Syst.* 222.

M. " bulbis ovatis, foliis lanceolatis plicatis, scapo variegato racemoso."

Hab. in *Muña* nemoribus calidis ; floret a Junio ad Septembrem ; Ruiz et Pavon.

7. *MAXILLARIA ligulata.* *Fl. Peruv. Syst.* 222.

M. " bulbis ovatis, foliis ensiformibus, scapo volubili, floribus paniculatis, nectarii labio ligulato."

Hab. in *Pillao* et *Acomayo* nemoribus ; floret Augusto et Septembri ; Ruiz et Pavon.

8. *MAXILLARIA hastata.* *Fl. Peruv. Syst.* 222.

M. " bulbis oblongis, foliis ensiformibus, scapo volubili, pedunculis distantibus racemosis, nectarii labio hastato."

Hab. in *Pillao* sylvis supra saxa ; floret Augusto et Septembri ; Ruiz et Pavon.

9. *MAXILLARIA paniculata.* *Fl. Peruv. Syst.* 223.

M. " bulbis oblongo-ovatis, foliis ensiformibus plicatis, floribus paniculatis."

Hab. in *Pillao* montibus et petrosis locis ; floret Septembri et Octobri ; Ruiz et Pavon.

10. *MAXILLARIA cuneiformis.* *Fl. Peruv. Syst.* 223.

M. " bulbis ovatis, foliis ensiformibus canaliculatis, floribus racemosis, petalis cuneiformibus, nectario cordiformi."

Hab. in *Tarmae* Provinciæ præruptis versus *Acobamba* et *Picoy* vicos ; floret Julio et Augusto ; Ruiz et Pavon.

11. *MAXILLARIA bicolor.* *Fl. Peruv. Syst.* 224.

M. " bulbis ovatis ancipitibus, foliis ensiformibus margine scabris, floribus racemosis, pedicellis subdichotomis."

Hab. in *Huassahuassi* saxosis ; floret Novembri et Decembri ; Ruiz et Pavon.

Vernaculè *çaça-çaca*, id est, *Empedrado desencaxado*, quia copiosissimi bulbi extra terram aggregati veluti pavementum lapidibus formatum referunt. Incolæ ad sitim mitigandam bulbos succosos subinsipidos frequenter masticant et sugunt. *Id.*

12. *MAXILLARIA tricolor.* *Fl. Peruv. Syst.* 224.

M. " bulbis ovatis compressis, foliis ensiformibus striato-nervosis, floribus racemosis erectis tricoloribus."

Hab. in præruptis et calidis locis *Huassahuassi* supra saxa ; floret Octobri et Novembri ; Ruiz et Pavon.

13. *MAXILLARIA triphylla.* *Fl. Peruv. Syst.* 225.

M. " bulbis ovatis triphyllis, foliis ensiformibus carinatis, floribus racemosis, petalis nectarioque unguiculatis acutis."

Hab. in *Tarmæ* provinciæ nemoribus versus *Vitoc* et *Collac* vicos, præsertim ad fluvii *Maraynioc* littora, ubi Joannes Tafalla eam delineavit; floret Augusto et Septembri; Ruiz et Pavon.

14. *MAXILLARIA undatiflora*. *Fl. Peruv. Syst.* 225.

M. "bulbis ovatis, foliis lanceolatis quinquenervibus, floribus paniculatis."

Hab. in nemoribus *Tarmæ* ad *Vitoc* arcem, unde Joannes Tafalla ad nos iconem et descriptionem misit; floret Aprili et Maio; Ruiz et Pavon.

15. *MAXILLARIA prolifera*. *Fl. Peruv. Syst.* 225.

M. "bulbis oblongis sulcatis, foliis lanceolatis, scapo bulbifero foliiferoque, floribus axillaribus 2-4-nis nutantibus."

Hab. in *Huassahuassi* frigidis locis ubi cl. Tafalla plantam descripsit et delineavit; floret Aprili et Maio; Ruiz et Pavon.

16. *MAXILLARIA ramosa*. *Fl. Peruv. Syst.* 226.

M. "bulbis fibrosis, caule radicante vaginato, floribus axillaribus solitariis."

Hab. in nemoribus *Chinchao* supra arbores ad *Mesapata* et *Machaynio* prædia; floret Junio et Julio; Ruiz et Pavon.

Obs. Habitu hæc species à reliquis differt; attamen fructificatio sub eodem genere eam inserere jubet; *Id.*

§ 2. *Scapigeræ*. Pedunculi radicales.

\* *Labellum anticum* (COLAX).

a. *Scapi uniflori*. Sp. 17-27.

17. *MAXILLARIA tetragona*. *Lindl. in Bot. Reg. t.* 1428.

M. pseudobulbis ovatis tetragonis, foliis oblongo-lanceolatis plicatis basi in petiololum angustatis solitariis, scapis solitariis pseudobulbis brevioribus, sepalis petalisque oblongo-ovatis obtusiusculis patulis subæqualibus, labello carnoso ventricoso trilobo erecto: lobis lateralibus parvis acutis intermedio ovato extûs convexo, disci appendice carnoso tabulari incumbente.

*Maxillaria tetragona*. *Hooker in Bot. Mag.* 3146.

Hab. in *Brazilia*, prope Rio Janeiro. (v. v. c.)

Pseudobulbi 3, folia 8-9 poll. longa. Flores virides, odore violarum nuper carptarum, apice cinnamomei, labello nunc luteo-viridi nunc albo intûs purpurâ maculato. Pollinia subquadrata, caudiculâ lineari diaphanâ, glandulâ parvâ ovatâ.

18. *MAXILLARIA viridis*. *Lindl. in Bot. Reg. t.* 1510.

M. pseudobulbis ovatis foliosis, foliis lanceolatis acuminatis undulatis plicatis, scapo unifloro vaginato brevi, sepalis petalisque conniventibus oblongo-subrotundis obtusis subæqualibus striatis, labelli brevis trilobî lobo medio transversè rhomboideo unguiculato plano.

M. *placantha*. *Hooker in Bot. Mag.* 3173.

Hab. in *Brazilia*, prope Rio Janeiro. (v. v. c.)

Flores virides, intûs purpureo seriatim maculati. Labellum cum basi parùm producta columnæ articulatam, unguiculatam, trilobum, medio refractum, lilacinum, lobis lateralibus minoribus erectis. Anthera carnosissima, bilocularis, loculorum valvulis membranaceis transversim de-

hiscentibus. Pollinia 4, per paria basi discreta glandulæ fuscae sulcatæ utrinque alatæ adhærentia.

19. *MAXILLARIA Parkeri*. *Hooker in Bot. Mag. t. 2729.*

*M. pseudobulbis ovalibus compressis monophyllis, folio lanceolato linguato coriaceo obscure striato basi angustato, scapis unifloris vaginatis erectis pseudobulbo parùm longioribus, vaginis ventricosus coloratis, sepalis oblongis obtusis, petalis lineari-lanceolatis, labello trilobo cucullato lineâ mediâ longitudinali clavatâ: lobis lateralibus integris intermedio oblongo undulato.*

*Hab. in Demerara; Parker.*

Folium pedale, 2-2½ poll. latum. Vaginæ rosæ viridi-limbatae. Sepala fulva; petala alba purpureo seriatim maculata. Labellum fusco-lilacinum, apice album, in axi luteum. Columna sanguinea. Pollinia in glandulam sessilia, bipartita.

20. *MAXILLARIA aromatica*. *Graham in Hooker's Exot. Fl. 219.*

*M. pseudobulbis ovatis compressis, foliis pluribus oblongo-lanceolatis plicatis scapis unifloris erectis longioribus, sepalis ovato-oblongis petalisque conformibus acutis, labelli semicylindracei laciniis lateralibus porrectis serrulatis: intermediâ bilabiata! labio superiore truncato nano inferiore spatulato apice recurvo serrulato.*

*Colax aromaticus. Spreng. Cur. Post. 307.*

*Hab. in Mexico; Graham.*

Scapi 4 poll. longi, filiformes, vaginati. Flores luteo-aurantiaci, extus virescentes. Labellum intus guttulis quibusdam aurantiacis et seriebus duabus pubescentiæ. Pollinia subglobosa, posticè fissa, caudiculâ longâ lineari, glandulâ rhomboideo-ovatâ.

21. *MAXILLARIA stapelioides*.

*M. pseudobulbis ovatis obtusangulis sulcatis 1-2-phyllis, foliis ovato-lanceolatis membranaceis glaucis 1-costatis, pedunculis brevissimis unifloris, ovariis pseudobulbis brevioribus, floribus patulis, sepalis petalisque oblongis acutis subæqualibus, labello ovato ventricoso 3-lobo: lobis lateralibus linearibus obtusis erectis intermedio ovato acuminato disco*

.....  
*Cymbidium stapelioides. Link et Otto Abbild. p. 111. t. 52.*

*Hab. in Brazilia. (v. ic. pict. in herb. Hooker.)*

Pseudobulbi 9 lineas longi. Folia 3 pollices longa, venis secundariis tenuissimis. Flores flavi *Stapelie* aspectu, purpureo interruptè maculati et fasciati.

22. *MAXILLARIA picta*. *Hooker in Bot. Mag. t. 3154.*

*M. pseudobulbis ovatis subsulcatis 1-2-phyllis, foliis lineari-lanceolatis planis, scapis erectis unifloris distanter vaginatis foliis duplò breviores, sepalis-petalisque lanceolatis globoso-conniventibus, labello trilobo apice cordato-ovato apiculato disco elevato pubescente.*

*Hab. in montibus Organ Brazilie; Harrison.*

Species pulchri generis longè pulcherrima. Folia pedalia. Flores magni, purpureo-maculati extus ochroleuci, intus salvo labello vitellinis. Columna elongata, purpurea. Pollinia subæqualia, in glandulam lunatam angustissimam sessilia.

23. *MAXILLARIA* Barringtoniæ. *Lodd. Bot. Cab. t. 1834.*

*M. pseudobulbis* oblongis compressis costatis, foliis subternis oblongo-lanceolatis acuminatis plicatis, scapo radicali vaginato unifloro erecto pseudobulbo vix longiore, sepalis petalisque ovato-lanceolatis obtusis, labelli trilobi lobo medio ovato rotundato fimbriato, callis duobus per hypochilium decurrentibus.

*Epidendrum* Barringtoniæ. *Smith. ic. pict. t. 25.*

*Dendrobium* Barringtoniæ. *Swartz. Nov. Act. Ups. 6. 82. Willd. Sp. Pl. 4. 132. Hooker Exot. Fl. t. 119.*

*Colax* Barringtoniæ. *Lindl. Bot. Reg. 897.*

*Dendrobium* ciliatum. *Swartz. Pers. Syn. 2. 523.*

*Maxillaria* ciliata. *Fl. Peruv. Syst. p. 221. Lindl. in Bot. Reg. 1206.*

Hab. supra truncos arborum in *Jamaica*. (v. v. c.)

Flores magni, olivacei, labello sordidè luteo.

24. *MAXILLARIA* Deppii. *Lodd. Bot. Cab. t. 1612.*

*M. pseudobulbis* ovatis obtusangulis, foliis oblongo-lanceolatis plicatis basi vaginantibus, scapo erecto unifloro foliis brevioribus: vaginis ventricosis acuminatis, sepalis oblongo-lanceolatis patentissimis, petalis minoribus oblongis undulatis conniventibus, labello cucullato 3-lobo apice recurvo in axi calloso.

Hab. in *Mexico*, prope *Xalapam*; Deppe.

Scapus 5-6 poll. longus. Sepala ferè bipollicaria, viridia, sanguineo serialim maculata. Petala nivea, lineis quibusdam purpureis interruptis ad basin. Labellum vitellinum, sanguineo parcè guttulatam.

I only know this beautiful species from Messrs. Loddiges' excellent figure. Is it not rather a *Cymbidium* allied to *C. marginatum*?

25. *MAXILLARIA* subulata.

*M. pseudobulbis* aggregatis angustissimis oblongis sulcatis diphyllis, foliis semiteretibus subulatis, pedunculis radicalibus densissimè vaginatis pseudobulbis brevioribus, floribus patulis, sepalis oblongis acutis: lateralibus parùm obliquis, petalis obtusissimis supra columnam conniventibus, labelli trilobi cucullati unguiculati lobis lateralibus erectis intermedio ovato obtuso subundulato, callo magno in axi.

Hab. in *Brazilia*. (v. ic. a Dom. Bauer ad plantam in Hort. Kew. floridam Novembre 1818 depict.)

Folia 4 poll. longa. Flores intensè fusco-rubri, immaculati. Columna lutea interruptè vittata. Pollinia 4, per paria glandulæ lunatæ elongatæ adhærentia. Anthera scabra.

26. *MAXILLARIA* grandiflora.

*M. pseudobulbis* ovatis compressis diphyllis, foliis lanceolatis acutis, scapis unifloris, floribus explanatis, sepalis lanceolatis acutis lateralibus apice revolutis, petalis angustioribus, labello ovato obtuso complicato subundulato basi transversè plicato.

*Dendrobium* grandiflorum. *Humb. et Kunth. N. G. et Sp. Pl. 1. 359. t. 88.*

*Broughtonia* grandiflora. *Spreng. Syst. 3. 735.*

Hab. in radicibus *Andium Paraguayensium* prope rupem *El Pupito*, villam *La Erre*, et planitiem montanam *Sacondonvensium* alt. 1060 hexap. florens Octobre; Humb. et Bonpl.

Pseudobulbi fuscuscentes, nitidi, subtripollicares. Flores albi, carnosissimi. *Kunth.*

27. *MAXILLARIA parvula*. *Hooker Exot. Fl. t. 217.*

*M. pseudobulbis oblongis incurvis subcostatis, foliis binis linearibus? obtusis, floribus solitariis, sepalo supremo petalisque parallelis lineari-lanceolatis acuminatis: lateralibus basi valdè productis triangularibus acuminatis, labello obovato cucullato repando obtuso glandulâ longitudinali oblongâ pilosâ.*

*Colax parvulus. Spreng. Cur. Post. 307.*

*Hab. in Brazilia supra truncos arborum in montibus Organ; Harrison.*

*Flores magni speciosi. Sepala fulvo-aurantiaca. Petala magis lutea. Labellum fusco-purpureum, apice fulvo-aurantiacum, levissimè trilobum, potius repandum dicas. Folia serotina; perfecta ignota.*

b. *Scapi 2-multiflori. Sp. 28-35.*28. *MAXILLARIA Harrisoniæ. Lindl. in Bot. Reg. t. 897.*

*M. pseudobulbis ovatis monophyllis, foliis lanceolatis basi angustatis plicatis, scapo erecto bifloro foliis brevioris, sepalis oblongis patentibus: lateralibus basi valdè obliquis connatis calcar longum spurium referentibus, labelli trilobi cucullati lobis subæqualibus rotundatis margine crispis disco elevato calloso piloso.*

*Dendrobium Harrisoniæ. Hooker Exot. Fl. t. 120.*

*Colax Harrisoniæ. Lindl. in Bot. Reg. t. 897. Spreng. Syst. v. 3. 727.*

*Maxillaria Harrisoniæ. Hooker in Bot. Mag. 2927.*

*Hab. in Brazilia prope Rio Janeiro. (v. v. c.)*

*Inter speciosissimas generis. Flores cerini, pallidè flavi. Sepala lateralialia 2 uncias longa. Labelli lobi purpurei, discus luteus. Pollinia sessilia in glandulam latam subquadratam bidentatam.*

29. *MAXILLARIA palmifolia.*

*M. pseudobulbis conicis striatis, foliis solitariis lato-lanceolatis in basin petioliformem angustatis acuminatis plicatis, scapis erectis multifloris secundifloris foliis brevioribus, sepalis lanceolatis acutis basi productis in calcar spurium connatis, petalis ovato-lanceolatis parùm minoribus, labello concavo curvo columnæ incumbente fauce canaliculato-striato; laminâ crassiusculâ reflexâ.*

*Epidendrum palmifolium. Swartz. Prodr. 123.*

*Dendrobium palmifolium. Ib. N. Act. Ups. 6. 82. Willd. Sp. Pl. 4. 132. Swartz. Fl. Ind. Occ. 3. 1527.*

*Colax palmifolius. Lindl. in Bot. Reg. 897.*

*Hab. in arboribus Jamaicæ temperationis; Swartz.*

*Pseudobulbi 1-1½-unciales. Folia plus quam pedalia, petiolis 2-3-pollicaribus canaliculatis. Scapi radicales, 3-4-pollicares, squamis magnis membranaceis vaginantibus acuminatis. Flores magni, albi; ex Swartzio.*

30. *MAXILLARIA Warreana. Lodd. Bot. Cab. ined.*

*M. pseudobulbis foliosis, foliis oblongo-lanceolatis acuminatis plicatis, scapo radicali erecto vaginato multifloro foliis longiore, sepalis ovatis concavis acutis basi subæqualibus, petalis minoribus conformibus, labello brevissimè unguiculato obovato-oblongo indiviso cucullato obtuso jugis tribus in medio elevatis carnosus, superficie laminæ seriatim corrugatâ marginibus planis.*

*Hab. in Brazilia. (v. v. c. comm. amic. Loddiges.)*

Sepala fulvo-lutea: lateralibus basi parùm inæqualibus nullo modo productis. Labellum basi luteum, apice pallidum, medio purpureum, cum columna vix articulatam.

31. *MAXILLARIA racemosa*. *Hooker in Bot. Mag. t. 2789*.

*M. pseudobulbis* ovatis compressis tetragonis monophyllis, foliis oblongo-lanceolatis tricotatis scapis gracilibus strictis multifloris brevioribus, sepalis oblongis acutis: lateralibus basi valdè elongatis in calcar spurium connatis, petalis linearibus spatulatis triplò minoribus, labello oblongo cucullato indiviso undulato emarginato in axi calloso, columnâ pubescente.

*M. racemosa*. *Lodd. Bot. Cab. t. 1318. opt.*

Hab. in *Braziliâ* prope Rio Janeiro; *Harrison. (v. v. c.)*

Pseudobulbi 2 poll. longi. Folia 4 poll. longa, basi in petiolum angustata. Scapus pedalis. Flores sordidè flavi, membranacei. Sepala patentia: superius cum petalis parallelum Cymbidiorum more. Labellum cum sinu sepalorum lateralium articulatam, album v. sordidè flavum purpureis maculis pallidis notatum. Anth. 1-locularis. Pollinia posticè sulcata, caudiculâ brevi, glandulâ parvâ.

This species is extremely well figured in the Botanical Cabinet; the representation in the Botanical Magazine appears to have been taken from a withered specimen.

32. *MAXILLARIA pallidiflora*. *Hooker in Bot. Mag. t. 2806*.

*M. pseudobulbis* aggregatis cylindraceis monophyllis, folio lato-lanceolato trinervi striatoque, scapo erecto gracili pseudobulbis subæquali bracteis distantibus linearibus instructo, sepalis lateralibus basi saccum rotundatum efficientibus petalisque subæqualibus angustè lanceolatis, labello oblongo obsoletè bituberculato margine undulato.

Hab. in insula *St. Vincentii*; *Guilding*.

Pseudobulbi 2-4 poll. longi. Folium 4-6 poll. longum. Bracteæ nullo modo vaginantes. Flores pallidi, viridi-flavi. Pollinia in glandulam parvam sessilia.

33. *MAXILLARIA maculata*.

*M. "bulbifera; foliis lanceolatis acutis, foliolis calycinis lanceolato-oblongis acutiusculis margine undulatis."*

*Dendrobium maculatum. Humb. et Kunth. N. G. et Sp. 1.359.*

*Broughtonia maculata. Spreng. Syst. 3.735.*

Hab. in locis sylvosis provinciæ *Bracomorensis* juxta urbem *Jaen*, et pagos *Sagique* et *Pucara*; item prope cataractam *Rentemæ* in ripa fluminis Amazonum, alt. 200-680 hexap. florens Augusto; *Humb. et Bonpl.*

Bulbus ovatus, compressus, longè sulcatus. Folia submembranacea, pedalia et longiora. Scapus folia superans, compressus, multiflorus. Flores suaveolentes, spicati. Bracteæ sesquipollicares, acutæ, carinatæ. Flores patentes, virides, fusco-maculati, pollicares. Sepala duplò latiora. Labellum oblongum, acutum, undulatum, album, striis violaceis longitudinalibus pictum, basi unguiculatum. Pollinia 4. *Ex Kunth.*

34. *MAXILLARIA latifolia*.

*M. "terrestris, foliis obovato-oblongis acutis, basi angustatis trinerviis membranaceis, foliolis calycinis oblongo-lanceolatis, labello oblongo."*



*Dendrobium latifolium.* *Humb. et Kunth. N. G. et Sp.* 1. 360.

Hab. in *Andibus Pastoensibus*, inter flumina *Guaytara*, et *Mayo*, juxta *Meneses*, *Voisaco*, et pagum *La Cruz* alt. 800-1000 hexap. florens Octobre; *Humb. et Bonpl.*

Terrestris. Folia pedalia et longiora, vix 4 poll. lata. Scapus 2-ped. multiflorus. Flores spicati, flavo-rosei, subbilabiati, patuli. Petala acuta, sepalo superiore breviora. Labellum cucullatum, apice reflexum, basi unguiculatum, sepalis duplò brevius, apicem versus punctis 5 aurantiacis pictum. Anthera ignota. *Ex Kunth.*

### 35. MAXILLARIA longifolia.

M. "terrestris; foliis lineari-lanceolatis acutis novem-nerviis membranaceis, foliolis calycinis lanceolatis acutis, labello ovato undulato-crenato."

*Dendrobium longifolium.* *Humb. et Kunth. N. G. et Sp.* 1. 360.

*Xylobium?* *longifolium.* *Lindl. in Bot. Reg.* 732. *Spreng. S. V.* 3. 732.

Hab. in temperatis humidis Provinciæ *Popayanensis* inter montem *Pitatumba*, villam *Guayacanes* et urbem *Almaguer*, alt. 1380 hex.; florens Novembre; *Humb. et Bonpl.*

Terrestris. Folia pedalia, pollicem lata. Scapus bipedalis, multiflorus. Bracteæ lineari-subulatæ. Flores patuli. Sepala 6-7 lin. longa. Petala paulò latiora et tenuiora. Labellum obtusum, basi cucullatum, unguiculatum, margine sinuato-reflexum, purpureum, interius papillis 2 striis setisque nigrescentibus obsitum (barbatum?). Columna virescens, basin versus maculâ purpureâ notatum. Anth. ignota. *Ex Kunth.*

\* \* Labellum posticum. (*XYLOBIUM.*) *Sp.* 36—37.

### 36. MAXILLARIA decolor. *Lindl. in Bot. Reg.* 1549.

M. pseudobulbis oblongis compressis, foliis solitariis oblongo-lanceolatis plicatis utrinque acuminatis, scapo radicali multifloro vaginato foliis breviora, sepalis ovato-oblongis obtusis patentibus, petalis duplò minoribus conniventibus, labello postico obsolete trilobo obtuso cucullato callis 5 clavatis parallelis æquilongis ultra medium procurrentibus.

Hab. in *Jamaica*, *Hort. Angl. (v. v. c.)*

Folia diversæ formæ et magnitudinis, nunc 8 poll. longa, 3 p. lata, nunc 18 p. longa, 2 p. lata. Scapus 4-pollicaris. Flores ochroleuci, im-maculati.

### 37. MAXILLARIA squalens. *Hooker in Bot. Mag. t.* 2955.

M. pseudobulbis ovatis teretibus diphyllis, foliis lanceolatis plicatis basi valde angustatis, scapo racemoso multifloro vaginato pseudobulbis duplò longiore, sepalis petalisque ovato-lanceolatis subundulatis acutis, labelli trilobi postici lobo intermedio ovato subundulato calloso.

*Dendrobium squalens.* *Lindl. in Bot. Reg. t.* 732. *Lodd. Bot. Cab. t.* 1059.

*Xylobium squalens.* *Id. fol.* 897.

Hab. in *Brazilia* prope *Rio Janeiro. (v. v. c.)*

Flores sordidè lutei, labello apice purpureo. Pollinia posticè sulcata in glandulam lunatam sessilia.

§. 3. *Spathaceæ*. Pedunculi terminales, e spatha vaginante erumpentes. Caules cylindracei, non bulbosi. (NORMIUM.) Species recognoscenda, habitu omnino Cattleyæ. Sp. 38.

38. *MAXILLARIA*? *spathacea*.

*M.* caulibus cylindraceis sulcatis, foliis solitariis ovato-oblongis obtusis submarginatis planis coriaceis, pedunculo terminali e vagina complicata oblonga acinaciformi erumpente, racemo 3-5-floro, sepalis lateralibus basi valde productis calcar spurium formantibus, labelli obovati cucullati trilobi lobis lateralibus rotundatis subdentatis intermedio ovato.

Hab. in *Braziliâ*, Boiss. (exam. s. sp. in herb. Hooker.)

Species pulchra, floribus *M. Harrisoniæ* facie et magnitudine. Pollen et Anthera ignotæ.

DUBIÆ.

39. *MAXILLARIA*? *aggregata*.

*M.* "caule ramoso repente foliato, foliis distichis lanceolatis obtusis, floribus terminalibus aggregatis."

*Dendrobium aggregatum*. Humb. et Kunth. n. g. et sp. 1. 358.

Hab. in crepidinibus *Andium* mitioris temperiei, inter villam *Meneses* et urbem *Pasto* alt. 1480 hexap. florens Novembri, Humb. et Bonpl.

Folia coriacea, sesquipollicaria aut paulò longiora, vix 4 lineas lata. Flores plures ad apicem ramorum aggregati, patuli. Sepala ovato-lanceolata, acuta, striata, 3 lin. longa: lateralibus planiusculis, basi ungui labelli adnatis. Petala lanceolata, acuminata, striata, sepalis paulò breviora et tenuiora. Labellum unguiculatum, ovatum, obtusum, carinatum, apice revolutum. Pollinia 4. ex Kunth.

40. *MAXILLARIA* *lyncea*.

Coatzacoatz Coxcoahid seu Lyncea. Hernand. Thesaur. Rev. Med. Nov. Hisp. p. 266.

Anguloa *Hernandesii*. Kunth. Synops. 1. 332.

Hab. in *Mexico*; Hernandez.

LXXXI. *ARPOPHYLLUM*.

*Arpophyllum*. La Llave et Lexarz. 2. 19.

Perianthium patulum. Sepala lateralia basi in gibbum connata. Petala multò angustiora. Labellum cum basi productâ columnæ articulatam?, indivisum, concavum, brevius calcaratum. Columna erecta. Pollinia 8, pyriformia, inter se "manipulis glutinosis ligata."—Epiphyta, ebulbis. Scapus e sinu folii coriacei ortus. Flores parvi, densè spicati.

Char. ex autoribus citatis.

The manner in which this plant is described leaves me in doubt whether it may not belong to *Epidendræ* rather than to *Vandææ*. It is apparently nearly related to *Maxillaria*; and is perhaps not distinct from *Appendicula*.

1. *ARPOPHYLLUM* *spicatum*. Lexarz. et Llav. l. c.

Hab. in *Mexico*, juxta *Arumbaro*, florens Septembre et Octobre; La Llave.

Planta epiphyta, ebulbis. Caules cylindrico-depressi, membranulis scariosis involuti. Folia solitaria, crassa, coriacea, longissima, canaliculata, falciformia. Spatha membranacea, colorata, monophylla, lateraliter dehiscens, liquorem glutinosum stillans. Scapus conico-elongatus, purpurascens, teres. Flores parvi, dilutè purpurei, sessiles, glutinosi, innumeri, in spicam cylindraceam densissimè conglomerati; ex Llave.

Dec. 1832.

x

## LXXXII. BIFRENARIA.

Sepala patula, libera, subæqualia; lateralia cum basi productâ columnæ adnata, vix basi obliqua. Petala sepalis duplò minora. Labellum cum pede mucronato columnæ articulatam, cucullatum, trilobum, medio callosum. Columna brevis, semiteres, mutica. Anthera mutica, sub-cristata. Pollinia 4, per paria incumbentia, caudiculis duabus distinctis materiei viscidæ rostellis adhærentibus, glandulâ .... — Epiphyta, pseudobulbosa, Maxillarise (Colacis) habitu.

Nearly related to Maxillaria, especially to the Colax division; but distinct in its double caudicula, and want of an obvious gland.

## 1. BIFRENARIA atropurpurea.

Maxillaria atropurpurea. Lodd. Bot. Cab. t. 1877.

Hab. in *Brazilia*, prope Rio Janeiro; Warre. (v. v. c. comm. amic. Loddiges.)

Pseudobulbi ovati, obtusi, tetragoni. Folia oblongo-lanceolata, plicata, solitaria. Racemi radicales, 3-flori, pseudobulbis paulò longiores. Flores atropurpurei, odoratissimi. Labellum lobis lateralibus brevibus divergentibus, intermedio transverso sub-3-lobo revolutò suberoso; callus in medio anticè tridentatus.

## LXXXIII. DICRYPTA.

Heterotaxis. Lindl. in Bot. Reg. t. 1028, caractere erroneo. Dicyrpta. Supra p. 44.

Sepala libera, erecta, æqualia. Petala conformia, paulò minora. Labellum oblongum, obsoletè trilobum, carnosum, cum columna articulatam, callo elevato interrupto disci. Columna cum ovario continua, semiteres, ad basin anticè clavata. Clinandrium convexum. Anthera obsoletè bilocularis. Pollinia 4, complanata, incumbentia (♂ ♂): posticis minoribus, caudiculâ brevi lineari, glandulâ lunatâ. — Herba epiphyta, acaulis. Folia coriacea, ligulata, cum basi nunc bulbosa articulata. Flores solitarii, axillares, pedunculis vaginatis.

## 1. DICRYPTA Baueri.

Heterotaxis crassifolia. Lindl. in Bot. Reg. t. 1028. Lodd. Bot. Cab. t. 1651.

Hab. in *Jamaica*, sec. hortulanos; an potiùs in *Brazilia*? (v. v. c.)

This plant is a memorable instance of the danger of describing Orchidaceous plants from imperfect cultivated specimens. I first met with it in 1824, in Mr. Lee's Nursery at Hammersmith when I found the pollen masses, in the words of my notes at that time made, "*linearia hinc crassiora, e granulis plurimis minutis angulatis filo axili coherentibus.*" I accordingly introduced this character into the definition of the genus *Heterotaxis*, which in fact received its name because it was as it were of two different orders, being a *Vandea* in appearance and an *Arethusea* in structure. Subsequently in 1830 when I for the first time saw, in Mr. Bauer's Portfolio, an analysis of this same plant, its pollen was represented so differently that I did not recognise it to be *Heterotaxis*, but took it for a new genus and called it *Dicyrpta*. Mr. Bauer had drawn the pollen masses as four, lying in pairs one upon the other so that the external masses which are the largest concealed the internal ones, whence the name. Neither gland nor caudicula having been found by Mr. Bauer I referred the plant to *Malaxidæ*. My

surprise then may be easily imagined when, about the end of January 1832, I saw in Mr. Bauer's possession a drawing of the plant of *Dicrypta Baueri* from which had been taken the analysis of the flower I had described, and recognised it to be my *Heterotaxis crassifolia*; nor was this surprise diminished when, upon the occasion of the species flowering in the Horticultural Society's Garden on the 24th of April 1832, I finally ascertained that not only was my original description in 1824 wholly erroneous, but that Mr. Bauer's drawing, otherwise admirably correct, was wrong in representing the pollen-masses without caudicula or gland. I found them to be seated upon a narrow short caudicula with a broad narrow lunate gland; and this is no doubt the true structure.

I am thus obliged to reproduce *Dicrypta* in its more correct position and to request that the genus may be erased from the station formerly assigned it among *Malaxidæ*. I abolish the name *Heterotaxis* because it was given in mistake.

#### LXXXIV. GOVENIA.

*Govenia.* Lindl. in Lodd. Bot. Cab. t. 1709.

*Perianthium bilabiatum.* Sepala lateralia falcata, labello supposita, basi paululum connata, supremo paulò majora. Petala sub sepalo supremo conniventia, breviora, obliqua. Labellum integerrimum, ecalcaratum, concavum, cum basi parum productâ columnæ articulatam, sessile. Columna basi paulò producta, teres, subfusiformis, apice utrinque marginata. Anthera calyptriformis, 1-locularis. Pollinia 4, solida, incumbentia, caudiculâ brevi, glandulâ minore triangulari.—Terrestris. Folia plicata. Spicæ radicales, multifloræ. Flores speciosi.

1. *GOVENIA superba.* Lindl. l. c.

*Maxillaria superba.* Lessers. et Llave Orch. Mex. 2. 13.

Hab in montibus Mexici, prope *Vallisoletum*, florens Augusto; Llave. (v. v. c. comm. amic. Loddiges.)

Flores aurantiaci, sanguineo-maculati. Petala cuneata, collateralis, cuspidata, basi valdè obliqua.

#### LXXXV. ALAMANIA.

*Alamania.* La Llave et Lessers. Nov. Veg. 31. (1825.)

*Perianthium patens, æquale.* Sepala lateralia basi connata, calcar referentia. Labellum petalis conforme, basi glandulosum aut tuberculatum. Columna carnosâ, tricuspidata, aptera, basi in calcar tubulosum producta. Anthera 4-locularis. Pollinia 4, pedicellata.—Herba epiphyta, pumila, pseudobulbosa. Scapi simplices multiflori. Flores speciosi.

Char. ex aut. citat. An partes rectè descriptæ? An caudicula polliniorum simplex, duplexve?

1. *ALAMANIA punicea.* La Llave et Lessers. l. c.

Hab. super arbores Mexici in monte excelso *Quinzeo*, prope *Vallisoletum*; La Llave.

planta exigua. Pseudobulbilli oblongi, conferti, subdiphylli, membranâ scariosâ tecti. Folia ovata, crassa, acuminata, fusca. Scapus terminalis,

bipollicaris, coloratus. Flores punicei, inodori. Labellum glandulâ baseos lutescenti. Anthera atropurpurea.

#### LXXXVI. PSITTACOGLOSSUM.

*Psittacoglossum. La Llave et Lexarz. Nov. Veg. 29. (1825.)*

**Perianthium patens.** Sepala elongata, lanceolata; duobus lateralibus infra labellum paulò connatis. Petala conformia, angustiora, incurva. Labellum crassum, scabrum, obscurè auriculatum, ad unguem tuberculo concavo! instructum. Columna clavata, incurva, subtriquetra. Anthera 2-locularis, (petaloideo-mitrata Llav.) Pollinia 4, lenticularia; exterioribus majoribus, caudiculâ .... glandulâ ....—Herba epiphyta. Pseudobulbi ancipites, monophylli. Scapus uniflorus, squamis imbricatis vestitus. Flos magnus atropurpureus.

Character ex autoribus citatis.

1. *PSITTACOGLOSSUM atratum. La Llave et Lexarz. l. c.*

Hab. in *Mexico*, supra arbores inter lichenes, prope *Jesus del Monte*; Llave. Floret vere.

Pseudobulbi conferti, subrotundi, oblongi, depressi, ancipites, 1-phylli. Folia oblongo-lanceolata, lævigata, conduplicata. Scapus radicalis, brevis, squamulis membranaceis, cuneatis, vaginantibus, distichè imbricatis tectus. Flos magnus, atropurpureus, terminalis, erectus. Labellum concolor, nigricans; ex *Llave*.

#### LXXXVII. CYNOCHES.

*Cynoches. Lindl. in Lodd. Bot. Cab. ined.*

**Perianthium explanatum.** Sepala lateralia lanceolata, basi paululùm sub labello connata; supremo angustiore. Petala latiora, falcata, decurva. Labellum liberum, ealcaratum, columnâ continuum, lanceolatum, integerrimum, ungue abrupto calloso. Columna elongata, arcuata, teres, apice clavata, auriculis duabus falcatis ad latera clinandrii. Anthera bilocularis. Pollinia 2, posticè sulcata, subpedicellata, caudiculâ lineari, glandulâ grossâ.—Habitus *Cataseti*.

1. *CYNOCHES, Loddigesii. Lindl. l. c.*

Hab. in *Surinami*, *Loddiges*. (v. v. c. comm. amic. *Loddiges*.)

Flores maximi, viridifusci. Labellum album, sanguineo-guttatum, apice virescens.

Of this most remarkable plant I have only seen a single expanded flower, from which this account has been taken.

#### LXXXVIII. MYANTHUS.

*Myanthus. Lindl. in Bot. Reg. 1538.*

**Perianthium explanatum.** Sepala libera, aequalia, lateralibus paululùm ascendentibus. Petala conformia, angustiora, sepalo supremo supposita.

Labellum planum, obovatum, 3-dentatum, sepalis brevius. Columna erecta, teres, basi bicirrhosa, posticè ad cardinem antheræ longè producta. Anthera et pollinia Cataseti.—Epiphyta, Cataseti omninè vegetatione.

Catasetum cristatum is intermediate between this genus and Catasetum.

1. *MYANTHUS cernuus*. *Lindl. l. c.*

Hab. supra arbores *Braziliæ*, prope Rio Janeiro. (v. s. sp. et ic. pict. in herb. Hooker.)

Racemi cernui, pedales, v. ultra. Flores luteo-virides, punctis atropurpureis confertissimis notati.

### LXXXIX. CATASETUM.

Catasetum. *Richard. in Kunth. Synops.* 1. 330.

Perianthium sæpius globosum, nunc explanatum. Sepala et petala subæqualia. Labellum crassum, carnosum, nudum ventricosum, v. explanatum fimbriatum; sub apice saccatum, obsolete trilobum. Columna erecta, aptera, libera, apice utrinque cirrhosa. Anthera subbilocularis, anticè truncata. Pollinia 2, posticè biloba v. sulcata, caudiculâ maximâ nudâ demum elasticè contractili, glandulâ cartilagineâ subquadratâ.—Herbæ terrestres v. epiphytæ, caulibus brevibus fusiformibus vestigiis foliorum vestitis. Folia basi vaginantia, plicata. Scapi radicales. Flores speciosi, racemosi, virides, nunc purpureo-maculati.

1. *CATASETUM maculatum*. *Kunth. Synops.* 1. 331.

C. "foliolis calycinis duobus interioribus maculatis; labello ciliato."

Hab. in Regno *Novo-Granatensi*, prope *Turbaco*, alt. 180 hexap. florens Maio; Kunth.

Folia membranacea, tripollicaria. Sepala angustiora, viridia; duo lateralia cornuum in modum arcuatim patentia; tertium petala amplectentia. Petala ovata, margine subserrata, internè nigro-maculata. Labellum maximum, inflatum, margine ciliatum, internè rubro-maculatum; ex Kunth.

2. *CATASETUM tridentatum*. *Hooker. Esot. Fl. tt.* 90. 91.

C. foliis oblongo-lanceolatis acuminatis, perianthiis compressis conniventibus, sepalis petalisque acuminatis, labello cucullato apice tridentato.

C. tridentatum. *Bot. Mag.*

? C. macrocarpum. *Rich. in Kunth. Synops.* 1. 331.

C. Claveringi. *Lodd. Bot. Cab. t.* 1344.

β. Floribus majoribus, sepalis petalisque acutis.

C. Claveringi. *Lindl. Bot. Reg. t.* 840.

C. floribundum. *Hooker. Esot. Fl.* 151.

Hab. in *America æquinoctiali*; in insula *Trinitatis*. *Hooker*; β. in *Braziliæ* ad sinum Sancti Salvatoris, nec non in insula *Trinitatis*; *Hooker.* (v. v. c.)

Sepala viridia v. luteo-viridia. Petala viridia purpureo plus minus maculata, nunc omnino purpurea. Labellum apice sæpius vitellinum, intus plerumque maculatum.

I am persuaded these are all varieties, or rather states, of the same species, which flowers very differently in different states of health. C.

*Claveringi* has indeed less acuminate petals and sepals, and larger flowers, but these are but slender distinctive marks; and *C. floribundum* differs from the last in nothing but its greener flowers with a less internal spotting. I have also seen varieties with smaller flowers, and other marks of difference, but they are not worth notice.

Most likely Richard's *C. macrocarpum* from Cayenne belongs here. At least there is nothing in the half dozen words said about it by Mr. Kunth to shew the contrary.

3. *CATASETUM Hookeri.* *Lindl. Coll. Bot. t. 40.*

*C. foliis lanceolatis triplicatis, perianthiis globosis, labello apice incurvo: lateribus denticulatis.*

Hab. in *Brazilia*; *Swainson.* (v. v. c.)

Flores in genere minores, sepalis subtestaceis, petalis viridibus, labello viridi, apice luteo, intus purpureo maculato.

4. *CATASETUM semiapertum.* *Hooker. Exot. Fl. t. 313.*

*C. foliis oblongo-lanceolatis multiplicatis racemo compacto longioribus, perianthiis subpatentibus, labello apice incurvo: lateribus denticulatis.*

Hab. in *Brazilia*; *Hooker.*

Flores virides, unicolores, salvo apice luteo labelli; majores quam in *C. Hookeri* cui proximum locetur.

5. *CATASETUM purum.* *Nees ab Esenb. Plantarum in h. med. Bonnens. Icon. p. 1. t. 1.*

*C. foliis lineari-lanceolatis, perianthio patente obsolete punctato, labello ventricoso apice incurvo concolore ciliato integerrimo.*

Hab. in *Brazilia*; *Nees ab Esenb.*

Planta rarissima, in anno 1824 in Horto medico Bonnensi sub auspiciis Sinningii hortulani periti floruit. *C. lurido* valde similis est, sed folia hujus quadruplò latiora; an eadem?

Flores virides immaculati, v. vix maculati, magnitudine *C. Hookeri*.

6. *CATASETUM luridum.*

*C. foliis oblongis 5-plicatis, perianthio globoso vix maculato, labello ventricoso concolore apice recto integerrimo.*

*Anguloa lurida.* *Link. in Verhandl. des Vereins. Z. bef. des Gartenb. in dem Königl. Preuss. Staat. 1. p. 289. t. 6.*

Hab. in *Brazilia*; *Link.*

*C. Hookeri* simillimum; verosimiliter diversum foliis latioribus, labello minus maculato et minus apice incurvo, nec ad marginem denticulato. An idem ac *C. semiapertum*? differre videtur labelli marginibus integerrimis, nec serrulatis.

7. *CATASETUM cristatum.* *Lindl. in Bot. Reg. t. 966.*

*C. foliis oblongo-lanceolatis multiplicatis, perianthiis explanatis, sepalo supremo petalisque conniventibus, labello fimbriato cristatoque expanso.*

Hab. in *Brazilia* ad sinum Si. Salvatoris; *G. Don.* (v. v. c.)

Flores virides; labellum album fimbriis clavatis.

Myanthus esset, si saccus labello abfuit cirrhiose ab apice columnæ.

## XC. MONACHANTHUS.

*Monachanthus.* Lindl. in Bot. Reg. 1838.

Perianthium explanatum. Sepala et petala aequalia, deorsum versa. Labellum posticum, carnosum, indivisum, ventricosum, sepalis multò majus. Columna brevis, crassa, mutica. Anthera.... Pollinia.... Epiphyta, Cataseti habitu.

This genus differs from *Catasetum* in the want of cirrhi upon its short column, and in the expanded perianthium, the five segments of which are turned all one way, like those of *Eulophia*.

1. *MONACHANTHUS* *viridis*.

Hab. in *Brazilia*, supra arbores in Corcovado. (v. ic. pict. et s. sp. in herb. Hooker.)

The fleshy stems are exactly those of *Catasetum*, as are the leaves, except that they are shorter. In the drawing I have examined, the flowers are represented in pairs from the apex of an erect scape about 9 inches high: they are fleshy, and of a deep uniform green, with a labellum that looks something like a hood drawn over a little face represented by the column.

## XCI. STANHOPEA.

*Stanhopea.* Hooker in Bot. Mag. 2948-9. (Nov. 1829.)—*Ceratochilus.* Lindl. in Lodd. Bot. Cab. 1414, non Blumii.

Perianthium membranaceum, patentissimum v. reflexum. Sepala libera, subundulata, mole sua ruentia. Petala conformia angustiora. Labellum liberum, anticum, ecalcaratum, carnosum, utrinque cornutum; dimidio superiore (epichilio) convexo, inferiore (hypochilio) excavato. Columna longissima, petaloideo-marginata. Anthera 2-locularis. Pollinia 2, elongata, fissa, caudiculâ quàm glandula biloba stipitata breviora. —Epiphytæ pseudo-bulbosæ. Folia plicata. Scapi radicales, vaginati, pauciflori. Flores maximi magis minùsve maculati.

1. *Stanhopea insignis.* Hooker l. c.

8. labello medio quàm maximè constricto, hypochilii subrotundi lateribus cornutis incurvis, epichilio ovato medio depresso cornubus duobus baseos incurvis.

*Epidendrum grandiflorum.* Humb. et Bonpl. Pl. æq. p. 94. t. 27.

*Anguloa grandiflora.* Id. n. g. et sp. pl. 1. 343. Kunth. Synops. 1. 332. Spreng. Syst. 3. 726.

Hab. supra arborum vetustarum truncos in umbrosis sylvis prope Cuença in *Quito*; Humb. et Bonpl. (v. v. c.)

Sepala carnosæ, flava, intus sanguineo guttata. Petala undulata, reflexa, minùs lutea, sanguineo interruptè fasciata. Labellum albidum, atrosanguineo densè guttatum.

2. *Stanhopea Bucephalus.*

8. labello medio constricto, hypochilio cymbiformi utrinque carinato marginibus muticis, metachilio subtus calloso pulvinato marginibus carnosopetaloides auriculatis carinatis inflexis sublobatis, epichilio ovato-lanceolato basi bicorni: cornubus spatulatis carnosis divaricatis elongatis.



Hab. in *Mexico*; Ruiz. et. Pavon. (exam. s. sp. in Hort. Lambert.)

Folium fere pedale, in petiolum longum angustatum, membranaceum, parùm plicatum. Flores magnitudine *S. oculatæ*. Sepala lateralìa lanceolata angusta et petala undulata. Hypochilium metachilio longius a fronte angustatum. Epichilii cornua metachilio et hypochilio simul sumptis longitudine æqualia; lamina verosimiliter concava basi angustata, cornubus longior, basi squamulâ recurvâ aucta. Flores duos apertos et folium unicum chartæ agglutinatum tantum vidi.

### 3. *STANHOPEA grandiflora*.

*S.* labello oblongo non medio constricto, hypochilio pone basin bicorni, epichilio ovato acuto, metachilio duplò longiore solido plano-convexo anticè truncato tridentato, scapo erecto bifloro petalis brevior.

*Ceratochilus grandiflorus*. Loddiges Bot. Cab. t. 1414.

Hab. in insula *Trinitatis*; Loddiges. (v. v. c. comm. amic. Loddiges.)

Flores candidi.

### 4. *STANHOPEA eburnea*. Lindl. in Bot. Reg. t. 1529.

*S.* labello oblongo non medio constricto, hypochilio pone basin bicorni, epichilio ovato-oblongo obtuso, metachilio duplò longiore solido plano-convexo anticè truncato bidentato, scapo pendulo bifloro petalis duplò longiore.

Hab. in *Brazilia*, prope Rio Janeiro; Loddiges. (v. v. c. comm. cl. Bateman.)

Scapi penduli, biflori, cum ovario  $4\frac{1}{2}$  poll. longi. Vaginæ laxæ, ovatæ, obtusæ, internodiis vix æquales. Flores candidi. Sepala oblongo-lanceolata,  $2\frac{1}{2}$  poll. longa,  $1\frac{1}{2}$  lata. Petala conformia, angustiora. Labellum cornubus è medio margine hypochilii, metachilioque lineis quibusdam interruptis purpureis notatis.

### 5. *STANHOPEA oculata*.

*S.* labello medio constricto, hypochilii elongati lateribus cornutis erectis basi bimaculatis, epichilio ovato acuminato cornubus duobus baseos incurvis.

*Ceratochilus oculatus*. Lodd. Bot. Cab. t. 1764.

Hab. in *Brazilia*, Loddiges. (v. v. c.)

Flores pallidè lutescentes, maculis plurimis sanguineis ocellatis conspersi. Labellum hypochilio vitellino, utrinque maculâ atropurpureâ ovali magnâ notatum.

## XCII. GONGORA.

Gongora. Fl. Peruv. Prodr. 117. t. 25.

Perianthium explanatum. Sepala lateralìa libera divaricata; supremum cum dorso columnæ connatum. Petala minora, columnæ medio adnata. Labellum cum basi columnæ continuum, liberum, unguiculatum, hypochilio explanato utrinque cornuto, epichilio verticali ancipiti (faciebus oppositis complicatis connatis) acuminato. Columna longissima, arcuata, clavata, marginata. Anthera subbilocularis. Pollinia 2, linearia, in caudiculam cuneatam sessilia.—Herbæ epiphytæ pseudobulbosæ. Folia plicata. Racemi longissimi, flexuosi, multiflori.

1. *GONGORA atropurpurea*. *Hooker Exot. Fl.* t. 178.

*G.* foliis multiplicatis, sepalis e lata basi acuminatis, hypochilio sub-4-cornuto denticulis interjectis.

*Hab.* in insula *Trinitatis*; *Hooker*.

*Pseudobulbi* costati. *Racemi* bipedales. *Flores* atropurpurei, immaculati.

2. *GONGORA quinquenervis*. *Fl. Peruv. Syst.* 237.

*G.* foliis 5-plicatis lanceolatis, sepalis concavis basi angustatis, hypochilio bicorni dorso calloso.

*Hab.* in sylvis *Pozuzo* supra arbores; *Ruiz et Pavon*. Floret Augusto. Septembre et Octobre.

*Flores* luteo-purpurascences; ex *Fl. Per.*

## XCIII. CORYANTHES.

*Coryanthes*. *Hooker. Bot. Mag.* 3102.

*Perianthium* patentissimum. *Sepala* dilatata, flexuosa, conduplicata; lateralibus maximis, basi distinctis. *Petala* multò minora erecta. *Label- lum* unguiculatum, maximum, galeatum, cum basi columnæ continuum, nullo modo articulatum, tridentatum, in medio unguis appendice pocu- liformi circumdatum. *Columna* teres, basi bicornis, elongata, apice re- curva, bialata. *Stigma* rima transversa. *Anthera* bilocularis. *Pollinia* 2, compressa, posticè sulcata, caudiculâ lineari arcuatâ, glandulâ lunatâ apicibus approximato-recurvis. — *Herbæ* epiphytæ, pseudobulbosæ. *Folia* striata. *Racemi* penduli. *Flores* maximi.

1. *CORYANTHES speciosa*. *Hooker l. c.*

*C.* foliis angustè lanceolatis, scapis erectis bifloris, labello unicolore.

*Gongora speciosa*. *Hooker in Bot. Mag.* t. 2755.

*Hab.* in *Brazilia* præsertim supra arbores in collem *Victoria* dictum prope sinum *Si. Salvatoris*, ubi cæspites latos efficit. (*v. v. c. comm. cel. Harrison.*)

*Flores* odorem subingratum spirant.

The two horns at the base of the column secrete from their points a great quantity of honey, which is caught in the cup-like appendage of the lip. Mr. Harrison informs me that the sepals when newly expanded open out flat like a bat's wing, and that they are approaching the period of withering when in the state represented in Dr. Hooker's plate.

2. *CORYANTHES maculata*. *Hooker in Bot. Mag.* t. 3102.

*C.* foliis lato-lanceolatis, scapis nutantibus multifloris, labello intus purpu- reo-maculato.

*Hab.* in sylvis *Demerara*, supra arbores; *Parker*.

*Scapi* floribus 5 maximis onusti et decurvi.

3. *CORYANTHES macrantha*. *Hooker l. c.*

*C.* foliis . . . . , scapis . . . . , labello basi utrinque quatè plicato: plicis deflexis.

Jan. 1833.

*Gongora macrantha*. *Hooker in Bot. Miscell. t. 80.*

*Hab. in Caraccis; Lockhart.*

Flores maximi generis. Columna basi utrinque auriculata.

#### XCIV. ANGULOA.

*Anguloa. Fl. Peruv. Prodr. 118. t. 26.*

Perianthium clausum, globosum. Sepala et petala libera, concava, subæqualia. Labellum longè unguiculatum, cucullatum, bilobum, lacinulâ intermediâ reflexâ. Columna semiteres, clavata, apice bicornis. Anthera rostrata. Pollinia 2, caudiculâ lanceolatâ, (bifidâ?) glandulâ parvâ ovali.—Herba pseudobulbosa. Folia plicata. Scapi uniflori.

Character ex *Fl. Peruvianâ*.

1. *ANGULOA* uniflora. *Fl. Peruv. Syst. p. 228.*

A. "bulbis ovatis ancipitibus, foliis lanceolatis 7-nervibus plicatis, scapis unifloris."

*Hab. in Muña et Chinca* runcationibus, vernaculè *Carpales* dictis; et profusè in *Tarmæ* nemoribus ad *Huayahal, Chanchamayo et Siusa* tractus; floret Augusto et Septembre; Ruiz et Pavon.

2. *ANGULOA* superba. *Humb. et Kunth. N. G. et Sp. Pl. 1. 343. t. 93. Kunth. Synops. 1. 332.*

A. "foliis subtrinerviis, pedunculis multifloris, calycibus clausis."

*Periquito Hispanorum.*

*Hab. supra arbores in temperatis Provinciæ Tumbezensis, juxta Zeruma Peruvianorum, et pagum Catacocha; colitur in hortis Loxensibus, alt. 1050 hexap.; floret Julio; Humboldt et Bonpl.*

Odorem dulcem, nec tamen suavem spirat. Pseudobulbi oblongi, striatocostati, monophylli. Folia petiolata, oblongo-lanceolata, acuminata, undulata, 10-poll. longa. Scapus pauciflorus, folio brevior. Perianthium subglobosum, foliolis coriaceo-carnosis, rubris, maculis purpureis variegatis. Labellum posticum, infernè angustatum, supernè trilobum, purpureo-maculatum, medio zonâ transversali albâ notatum, tuberculisque 2 alæformibus instructum: lobis lateralibus rotundatis intermedio emarginato latioribus. Columna subalata, carnosa, brevis, nivea, basi margine punctis raris picta. *Ex Kunth.*

#### XCV. PERISTERIA.

*Peristeria. Hooker Bot. Mag. 3116.*

Perianthium globosum. Sepala basi subconnata, concava, basi labello connata. Petala conformia, paulò minora. Labellum erectum medio articulatum; dimidio superiore obovato truncato medio pulvinato inferiore bilobo columnâ continuo. Columna erecta, semiteres, basi magnâ dilatata. Anthera ecristata, bilocularis. Pollinia 2, posticè fissa, glandulâ sessili nudâ rostellum involvente.—Herba subterrestris, pseudobulbosa. Folia plura, plicata. Scapi vaginati, radicales, multiflori. Flores speciosi.

1. *PERISTERIA elata*. *Hooker l. c.*

Hab. in *Panama*, ubi vernaculè appellatur *El Spirito Santo*. (v. v. c. *comm. cel. Harrison*.)

*Pseudobulbus ovatus*, ovi cygnei magnitudine, folia 3-5 gerens, 2-3-pedalia, 6 poll. lata, lanceolata, acuta, plicata. Scapus 4-pedalis, multiflorus. Flores albi, globosi, odorem subaromaticum debilem spirantes. Labellum cum columna continuum nec articulatum, tripartitum, lobo medio (epichilio) cum inferiore elasticè articulatè, carnoso, convexo, purpureo-punctato, apiculato, bicorni; cornubus tenuibus planis obtusis porrectis subdenticulatis; lobi laterales in medio tuberculo depresso, angulato, acuto, augentur.

XCVI. *EUCNEMIS*.

Sepalum supremum cum petalis parallelum galeam referens; lateralibus indiviso inappendiculato supposita, cum pede parum producto columnæ connata. Columna alato-marginata. Pollinia 4, collateralia (oo oo), per paria connata, caudiculâ lineari, glandulâ parvâ.—Folia plicata, membranacea, ex ochrea infundibulari exserta. Scapus terminalis, distanter vaginatus, multiflorus. Flores bilabiati.

1. *EUCNEMIS brevilabris*.

Hab. in *Mexico*; *Ruiz et Pavon*. (*exam. s. sp. in herb. Lambert*.)

Folia oblongo-lanceolata, basi valdè angustata, plicata. Scapus foliis longior. Bractæ oblongæ, acutæ, ovario longiores. Alabastris acinaciformes, obtusissimi. Labellum ovatum planum, membranaceum, indivisum.

XCVII. *CYMBIDIUM*.

*Cymbidium*. *Swartz. Nov. Act. Ups.* 6. 70.—*Camaridium*. *Lindl. in Bot. Reg.* t. 844.

Perianthium explanatum, petalis sepalisque subæqualibus liberis. Label- lum sessile, liberum, ecalcaratum, concavum, cum basi columnæ nunc articulatum, nunc leviter connatum, indivisum v. trilobum. Columna erecta, semiteres. Anthera bilocularis. Pollinia 2, sæpius posticè biloba, in glandulam subtriangularem subsessilia.

*Cymbidium*, as understood in this work, is no doubt made up of several very different genera, the characters of which, from want of sufficient information and the knowledge of a greater number of species, cannot be positively made out. I presume each section will be hereafter recognised as distinct, for which reason I have given them names which may be retained either as generic or sectional.

The first, or the *Eucymbidia*, are the genuine species, all of which have two lamellæ more or less distinctly shewn upon the lip—*Camaridium* might perhaps have been safely continued separate.—*Bolbidium* is very near *Maxillaria*.—*Angidium* is altogether distinct, but I am not sure that I have made out its characters rightly.

§ 1. *Acaulia, ebulbia*, foliis sæpius ensiformibus, floribus galeatis, labello lamellâ duplici. (*EUCYMBIDIUM*.)

§ 2. *Caulescentia, ebulbia*. (*PSEUDO-VANDA*.)

§ 3. *Caulescentia, axillis pseudobulbiferis, floribus non galeatis*. (*CAMARIDIUM*.)

§ 4. *Rhizoma repens, pseudobulbus 1-2-phyllus gerens*. (*BOLBIDIUM*.)

§ 5. *Acaulia, tuberosa, foliis plicatis, columnâ alatâ, labello indiviso nudo*. (*ANGIDIUM*.)

† Species dubiæ.

§ I. *Acaulia, ebulbia, foliis sæpius ensiformibus, floribus galeatis, labello lamella duplici.* (EUCYMBIDIUM.)

1. CYMBIDIUM sinense. Willd. Sp. Pl. 4. 111.

C. foliis lanceolato-ensiformibus subcarnosis striatis, scapis erectis multifloris, bracteis ovario subæqualibus, sepalis petalisque oblongo-lanceolatis (vix striatis,) labello oblongo obtuso indiviso revoluti: lamellis arcuatis apice dilatatis conniventibus.

Epidendrum sinense. Andr. Bot. Rep. 3. t. 216. Bot. Mag. 888.

C. fragrans. Salisb. in Hort. Trans. 1. 261.

Hab. in China. (v. v. c.)

Flores fusco-purpurei odoratissimi, labello luteo-viridi maculato.

Adest speciei alterius icon in Bibl. Hort. Soc. Lond. (C. floribundim.) a C. sinense diversæ floribus numerosissimis minoribus, sepalis obtusis, labello trilobo sanguineo medio luteo.

2. CYMBIDIUM ensifolium. Swartz. Nov. Act. Ups. 6. 77.

C. foliis ensiformibus striatis acutis, scapis erectis multifloris, bracteis ovario duplò brevioribus, sepalis petalisque lineari-oblongis acutis, labello indiviso planiusculo oblongo obtuso revoluti: lamellis arcuatis inconspicuis continuis.

Epidendrum ensifolium. Linn. Sp. Pl. 1352. Smith Spicileg. Bot. 22. t. 24.

Limodorum ensatum. Thunb. Jap. 29. Banks, Ic. Kämpf. t. 3.

C. ensifolium. Willd. Sp. Pl. 4. 112. Bot. Mag. 1751.

Hab. in China. (v. v. c.)

Flores viridi-lutei venis purpureis striati. Labellum maculatum.

3. CYMBIDIUM xiphiifolium. Lindl. in Bot. Reg. t. 529.

C. foliis lineari-ensiformibus cartilagineo-serrulatis striatis acutis, scapis erectis 4-5-floris, bracteis inferioribus acuminatis ovario brevioribus superioribus majoribus, sepalis petalisque lineari-oblongis acutis unicoloribus, labello indiviso cucullato revoluti obtuso intus bicalcarato.

Hab. in China; Hort. (hab. s. c. et v. v.)

Flores pallidi virides unicolores.

4. CYMBIDIUM hæmatodes.

C. foliis lineari-ensatis 3 costatis, scapo erecto multifloro, bracteis lanceolatis acuminatis ovario longioribus, sepalis lineari-oblongis acutis, petalis lanceolatis undulatis, labelli lobis lateralibus rotundatis obsoletis intermedio ovato undulato acutiusculo: lamellis arcuatis integris.

Hab. in Zeylona, in locis humidis umbrosis sylvarum, florens Julio, Macrae; (hab. s. sp. et v. ic. pict.)

Racemus 6-7-florus. Sepala et petala albida, venis roseis lineata. Label- lum album maculis parvis sanguineis circa ora guttatum. Columna lutea.

5. CYMBIDIUM macrorhizon.

C. foliis..., rhizomate repente subterraneo articulado, scapo ascendente laxè vaginato, racemo stricto laxo paucifloro, sepalis lineari-oblongis, petalis latioribus acutioribus, labelli trilobi concavi lobis lateralibus rotundatis intermedio elongato obtuso convexo revoluti: lamellis arcuatis apice dilatatis conniventibus.

Hab. prope viam in Cashmere circa gradum 31 lat. bor. in vallibus sole fervido calentibus, Royle. (exam. s. sp. in herb. Royle.)

Verosimiliter aphyllum. Vaginæ et bracteæ inferiores ventricosæ, acutæ. Sepala lineas 10 longa.

6. *CYMBIDIUM cyperifolium*. Wall. Cat. no. 7353.

C. foliis lineari-ensiformibus acutis striatis tricostatis scapis strictis longioribus, bracteis foliaceis acuminatis ovarii longioribus, sepalis petalisque lineari-oblongis acutis striatis, labelli 3-lobi canaliculati lobis lateralibus acutis intermedio ovato refracto: lamellis subparallelis continuis.

Hab. in *Sylhet*, Wallich. (hab. s. sp. e Mus. Angl. Ind. et v. ic. pict.)

Sepala et petala  $1\frac{1}{2}$  poll. longa, viridia, basi purpurascentia. Labellum pallidè viride, laminà bis quaterve purpureo-maculatà, hypochilio venis purpureis confluentibus marginato.

7. *CYMBIDIUM longifolium*. Don. Prodr. Nep 36. Wall. Cat. no. 7356.

C. foliis lineari-ensiformibus striatis acutis, scapo erecto nutante multifloro, bracteis minutis, sepalis lineari-oblongis petalisque lineari-spatulatis falcatis acutis striatis, labelli trilobi lobis lateralibus brevibus acutis intermedio ovato acuto subcordato: lamellis parallelis continuis integerrimis.

Limodorum angustifolium. Hamilt. ic. penes Dom. Bauer.

Hab. in *Napalia et Kamaon*; Wallich. (hab. s. sp. e Mus. Angl. Ind. et v. ic. pict.)

Sepala et petala  $1\frac{1}{2}$  poll. longa, viridia, sanguineo-striata. Labellum cum pede columnæ connatum, flavum, venis maculisque quibusdam sanguineis notatum.

8. *CYMBIDIUM giganteum*. Wall. Cat. no. 7355.

C. foliis ensiformibus striatis acutis racemo cernuo multifloro longioribus, bracteis minutis, sepalis oblongis petalisque lineari-lanceolatis acutis, labelli trilobi lobis lateralibus parvis acutis basi pubescentibus intermedio multò majore ovato acuto undulato medio barbato: lamellis arcuatis apice connatis pilosis.

Limodorum longifolium. Hamilt. ic. penes Dom. Bauer.

? Cymb. iridioides. Don. Prodr. 36.

Hab. in *Napalia*; Wallich. (hab. s. sp. e Mus. Angl. Ind. et v. ic. pict.)

Scapus  $1\frac{1}{2}$  pedalis, nutans, vaginis inflatis acuminatis. Flores fusco-purpurei, ochroleuco marginati. Sepala 2 poll. longa,  $\frac{3}{4}$  lata. Labellum cum basi columnæ connatum, ochroleucum, fusco-purpureo venosum et maculatum, ciliatum. Capsula 4 poll. longa, 6-costata, ovalis. Racemi post anthesin erecti.

Obs. Anthera non cum columna articulata, sed a facie ad dorsum usque omninò continua; reverà est mera cavitas apicis columnæ.

9. *CYMBIDIUM elegans*. Lindl. in Wall. Cat. no. 7354.

C. foliis lineari-ensiformibus acutis striatis racemo (densissimo) oblongo nutante longioribus, bracteis brevibus squamiformibus, floribus cylindraceis, sepalis petalisque lineari-oblongis obtusiusculis, labelli cuneati canaliculati apice trilobi lobis lateralibus acutis intermedio recto acuto parùm longiore: lamellis connatis basi abruptè discretis.

Limodorum cyperifolium. Hamilt. ic. penes Dom. Bauer.

Hab. in *Napalia*; Wallich. (hab. s. sp. e Mus. Angl. Ind. et v. ic. pict.)

Racemus aliquando 8 poll. longus,  $3\frac{1}{2}$  p. latus, oblongus; nunc multò

minor, 10-florus. Vaginæ scapi inflatæ, acuminatæ, internodiis longiores. Flores viridi-lutei. Labellum intus sanguineo-punctatum. Pollinia pyriformia, posticè fissa, basi discreta.

10. *CYMBIDIUM lancifolium*. *Hooker Exot. Fl. t. 51.*

C. foliis radicalibus oblongo-lanceolatis acutis scapis erectis paucifloris longioribus, bracteis ovario Spld brevioribus, labello 3-lobo apice recurvo lineâ mediâ elevatâ sulcatâ, caulibus fusiformibus carnosis.

Hab. in *Napalia*; *Wallich. (hab. s. sp. e Mus. Angl. Ind. et v. ic. pict.)*

Sepala candida; petala candida medio rosea; labellum candidum sanguineo-maculatum, lobo medio acuto. Labelli fabricam non videre contingit; Icon Wallichiana indicat duas lamellas contiguas.

11. *CYMBIDIUM suave*. *Brown Prodr. 331.*

C. "foliis elongato-linearibus carinatis, scapis axillaribus basi bracteis imbricatis, racemis multifloris, perianthio patenti foliolis obtusis, labello ecarinato indiviso."

Hab. in *Nova Hollandia*, prope *Portum Jackson*; R. Brown.

12. *CYMBIDIUM canaliculatum*. *Brown Prodr. 331.*

C. "foliis elongatis linearibus altè carinatis rigidis, scapis axillaribus basi bracteis imbricatis, racemis multifloris, perianthio patenti foliolis acutis, labello intus bicarinato: apice trilobo."

Hab. in *Nova Hollandia tropica*; R. Brown.

13. *CYMBIDIUM Finlaysonianum*. *Lindl. in Wall. Cat. no. 7358.*

C. foliis . . . ., scapo gracillimo (pendulo?) flexuoso multifloro, bracteis brevissimis squamiformibus, sepalis petalisque lineari-oblongis obtusis, labelli trilobi lobis lateralibus acutis intermedio oblongo undulato obtuso recurvo: lamellis ultra medium interruptis: dimidiis superioribus calcaratis.

Hab. in *Cochinchina*, ad sinum *Turon*, *Finlayson. (hab. s. sp. sine foliis e Mus. Angl. Ind.)*

Sepala  $1\frac{1}{4}$  poll. longa.

14. *CYMBIDIUM bicolor*.

C. foliis ensiformibus carnosis obliquè obtusis, racemis pendulis multifloris, bracteis minutis, sepalis petalisque lineari-oblongis acutiusculis, labelli trilobi saccati lobis lateralibus intermedioque ovato acutis: lamellis sigmoideis clavatis medio interruptis basi callosis.

C. aloifolium. *Blume Bijdr. t. 19. non Swarts.*

Hab. in *Zeylona*, *Macrae*; etiam in *Java*, ad radicem montis *Salak*, *Blume. (hab. s. sp. et v. ic. pict.)*

Sepala et petala purpurea, viridi pallido limbata. Labellum apice revolutum, pallidè viride, intra apicem purpureum, extus ad sinus bimaculatum.

Nearly related to *C. aloifolium*, but certainly distinct in its saccate labellum, the lamellæ of which are curved like an S, clavate at the apex, interrupted in the middle, thicker in the lower half, and having a callus at their base. The flowers are smaller, and very differently coloured.

15. *CYMBIDIUM aloifolium*. Swartz. Nov. Act. Ups. 6. 73.

C. foliis ensiformibus coriaceis obliquè obtusis, racemis pendulis multifloris, bracteis minutis, petalis sepalisque lanceolatis obtusiusculis, labelli revoluti lobis lateralibus acutis intermedio oblongo obtuso : lamellis interruptis clavatis posticè arcuatis.

Kansyram-maravara. *Rheede Mal.* 12. t. 8.

*Epidendrum aloifolium*. *Lin. Sp. Pl.* 1350.

*Aerides Borassi*. *Smith / in Ross Cycl. suppl.*

Hab. supra arbores per omnem continentem *Indiæ orientalis*, in insulis verosimiliter ignotum ; floret Aprili ; Roxburgh, Buchanan. (v. v. c. et s. sp.)

Sepala patentia ; petala circa columnam suberecta. Labellum cucullatum, 3-lobum, integerrimum, basi saccatum, disco duobus paribus callorum, uno pare in medio clavato altero versus basin arcuato. Columna semiteretes, erecta, libera, stigmatè concavo elliptico transversa. Anthera terminalis, opercularis, 1-locularis, non cristata, decidua. Pollinia 2, sessilia in glandulam stigma relinquentem, trigona, posticè lobulo aucta.

16. *CYMBIDIUM Wallichii*.

C. foliis latis ensiformibus apice obliquè retusis emarginatis, racemis longissimis pendulis multifloris, bracteis minutis, sepalis petalisque lineari-oblongis acutis intermedio lineari-oblongo : lamellis continuis parallelis.

C. aloifolium. *Wall. Cat.* no. 7352.

Hab. in *Cochinchina*, *Finlayson* ; in *Penang*, *Porter* ; ad ripas fluminis *Attran*, *Wallich*. (hab. s. sp. e Museo Angl. Ind.)

17. *CYMBIDIUM pendulum*. Swartz. Nov. Act. Ups. 6. 73. Willd. no. 30.

C. foliis ensiformibus coriaceis obliquè obtusis, racemis pendulis multifloris, bracteis minutis, petalis sepalisque lineari-oblongis obtusis, labelli trilobi lobis lateralibus acutis intermedio ovato acuto : lamellis continuis approximatis apice confluentibus.

*Epidendrum pendulum*. *Rosb. Corom.* 1. 35. t. 44.

C. crassifolium. *Wall. Cat.* no. 7357.

Hab. in arbores in provincia *Sihet*, *Roxburgh* ; etiam ad *Noakote*, florens *Maio*, *Wallich*. (hab. s. sp. e v. ic. pict.)

Racemus 2-pedalis. Flores straminei, venis sanguineis lineati. Folia 1½-3-pedalia. An idem ? C. pendulum, *Blume Bijdr.* "foliis lato-linearibus basi canaliculatis rigidis apice obliquè retusis, spicè longissimâ pendulâ, labello intus carinato." Hab. ad marginem fluminis *Tjapus*, in montanis *Salak Java* ; cui sepala lineari-oblonga acuminata margine revoluta, flavescentia, basi sordidè purpurascencia.

18. *CYMBIDIUM limbatum*. *Hooker in Herb.*

C. foliis oblongis coriaceis planis, racemis (pendulis ?) multifloris, bracteis minutis, sepalis petalisque linearibus obtusis, labelli trilobi canaliculati lobis lateralibus acutis intermedio lineari obtuso, loco lamellarum callis duobus sub sinibus squamisque 2 obliquis carnosus pone basin labelli.

Hab. in insula *Trinitatis* : *Shepherd*, (exam. s. sp. in herb. *Hooker*.)

19. ? *CYMBIDIUM violaceum*. *Humb. et Kunth. N. G. et Sp.* 1. 341.

C. "foliis distichis oblongo-ellipticis obtusis canaliculatis internè macula-



tis, pedunculo paucifloro, calycis foliolis exterioribus lanceolato-oblongis : duobus interioribus subcrenulatis, labello trilobo : lobo intermedio subrotundo emarginato crenulato internè ruguloso-venoso."

Hab. in sylvis *Orinocensibus* prope Cataractas *Aturensium*, et San Fernando de Atabapo, florens Maio : Humb. et Bonpl.

Epiphyta. Folia coriacea vix 3-poll., pollice latiora, basi vaginantia. Vaginæ inferiores aphyllæ, apice acuminatæ, 1½-2-poll. Scapus sub-8-poll. usque supra medium vaginis vestitus. Flores violacei, patentissimi. Sepala acuta, crassiuscula, 2-pollicaria. Petala utrinque acuta exterioribus paulò longiora. Labellum basin versus flavum. Pollinia ignota. *Ex Kunth.*

20. *CYMBIDIUM flabelliforme*. Swartz. *Nov. Act. Ups.* 6. 73.

C. "acaule, compressum, foliis basi attenuatis carinatis supernè planis ovato-lanceolatis nervosis, scapis abbreviatis unifloris. Swartz. *Fl. Ind. Occ.* 3. 1471.

Epidendr. flabelliforme. Swartz. *Prodr.* 123.

Hab. rarius in arboribus montium *Jamaicæ* ; Swartz.

Folia omnia radicalia in formam flabelli disposita ; media plusquam pedalia. Scapi radicales foliis multo breviores. Bracteæ 2, spathaceæ, ovatæ, acutæ, sub flore breviter pedicellato magno. Sepala et petala undulata, subæqualia, pollicaria, ovato-lanceolata, lineato-venosa, concava, alba. Labellum conforme, patens, ante columnam bicarinatum, marginibus ad basin erectis, undulatis ; apice planiusculum acutum. *Ex Swartz.*

21. *CYMBIDIUM aculeatum*. Swartz. in *Schrad. Diar.* 1799-225.

C. foliis linearibus patentibus scapo erecto flexuoso brevioribus, racemo denso paucifloro, sepalis petalisque conniventibus oblongis obtusis, labello obovati trilobi lobis lateralibus acutis intermedio oblongo recto rotundato : lamellis basi integris apice aculeatis.

Satyrium aculeatum. Linn. *Suppl.* 402.

Serapias aculeata. Thunb. *Prodr.* 3.

C. aculeatum. Thunb. *Fl. Cap.* 71. Willd. *Sp. Pl.* 4. 108.

Eulophia aculeata. Spreng. *Syst.* 3. 720.

Hab. ad *Cap. B. Sp.*, in summo Taffelberg, in planitiem frontis, Thunberg. (*hab. s. sp. comm. vel. Lehmann.*)

Flores parvi, flavi ; labelli laminæ albæ purpureæque.

22. *CYMBIDIUM tabulare*. Swartz in *Schrad. Diar.* 1799-224.

C. folio lineari solitario, scapo flexuoso striato, floribus 5 cernuis, sepalis ovatis obtusis concavis erectis, petalis conformibus patentibus, labello breviori convoluto concavo obtusissimo tripartito : lobis ovatis integris intermedio concavo breviori exciso.

Satyrium tabulare. Linn. *Suppl.* 402.

Serapias tabularis. Thunb. *Prodr.* 3.

C. tabulare. Willd. *Sp. Pl.* 4. 108. Thunb. *Fl. Cap.* 70.

Hab. ad *Cap. B. Sp.*, in planitiem montis tabularis prope frontem, Thunberg.

Flores virescentes. Labellum totum flavum. Scapus vix pedalis. Folium digitale.

23. *CYMBIDIUM flabellatum*.

C. foliis lineari-loratis distichis flabellatis scapo longioribus, racemo paucifloro, sepalis ovatis acutis, petalis erectis brevioribus, labelli lobis lateralibus acutis intermedio crispo trilobo: lobo terminali emarginato.

*Limodorum flabellatum*. *Thouars Orch. Afr. t. 39. 40.*

Hab. in *Madagascaria*; *Thouars*.

Folia 2 pedalia. Flores purpureo-lutei.

24. *CYMBIDIUM subulatum*. *Swartz. N. Act. Ups. 6. 73.*

C. "acaule, foliis subulatis sulcatis, racemis radicalibus." *Swartz. Fl. Ind. Occ. 3. 1473.*

*Epidendrum subulatum*. *Id. Prodr. 123.*

Hab. supra arbores in sylvis *Jamaicæ interioris*; *Swartz*.

Folia subpedalia, carnosa, parum recurvata. Racemi radicales 1-2-pollicares, 4-6-flori, laxi. Petala et sepala lato-linearia, subpatentia. Label- lum ovatum, acutum, concavum, petalorum magnitudine. *Ex Swartz.*

§. *Cauliscentia, ebullia*. (PSEUDO-VANDA.)

25. *CYMBIDIUM tenuifolium*. *Willd. no. 39.*

C. foliis teretibus, umbellis subsessilibus, sepalis linearibus obtusis paten- tibus sub apice mucronatis, petalis longioribus, labello oblongo concavo disco tricalloso basi auriculato apice membranaceo bilobo.

*Tsierou-mau-maravara*. *Rheede 12. t. 5.*

*Epidendr. tenuifolium*. *Linn. Sp. 1348.*

Hab. in *Malabaria*, *Rheede*; in *Zeylona*, supra arbores ad *Peradeniam*, *Macrae*. (*hab. s. sp. et v. ic. pict.*)

Sepala luteo-viridia, basi leviter connata, labello breviora. Petala ejusdem coloris. Labellum pallidè viride, purpureo pictum, facie *Ophrydis* cujus- dam. Columna parva, libera, quadrata; stigmatè totam faciem occu- pante. Pollinia 2, solida, leviter hinc excavata; caudiculâ latâ elasticâ; glandulâ latâ.

26. *CYMBIDIUM triste*. *Willd. Sp. Pl. 4. 99.*

C. foliis teretibus, umbellis subsessilibus, sepalis petalisque conniventibus carnosis oblongis cymbiformibus, labello oblongo sepalis duplo latiore.

*Epidendrum teres*. *Thunb.*

*Epidendrum triste*. *Forst. Prodr. n. 314.*

*Luisia teretifolia*. *Gaudich. Voy. 427. t. 37.*

*Vanda? trichorhiza*. *Hooker Esot. Fl. 72.*

Hab. in *Nova Caledonia*, *Forster*; insulis *Marianis*, *Gaudichaud*; *Japonia*, *Thunberg*; ad *Noakote Napaliæ*, *Wallich*; *Zeylona*, *Macrae*; (*hab. s. sp. et v. ic. pict.*)

Columna brevis semiteres, carnosa. Anthera 1-ocularis, mucronulata. Poll. 2, globosa, cava, caudiculâ brevi deltoideâ, glandulâ oblongâ. Ex- emplaria vernibus destructa tantùm vidi.

Caulis simplex, palmaris, vaginis sulcatis foliorum obtectus. Folia teretia, 6-7-uncias longa, arcuata. Spicæ laterales, breves, rigidæ, multifloræ. Bracteæ rotundatæ, nanæ. Perianthium connivens. Sepala ovata, obtusa. Petala conformia, paulò minora. Labellum saccato-concavum, liberum, oblongum, trilobum; lobis lateralibus abbreviatis, intermedio rotundato transverso. Columna brevis. Anthera subrotunda, ecristata. Pollinia 2, obovata, caudiculâ obovatâ, rostellò longo hamatè. *Ex Gaudich.*

Jan. 1833.

§. 3. *Caulescentia, axillis pseudobulbiferis, floribus non galeatis.* (CAMARIDIUM.)

27. *CYMBIDIUM vestitum.* Swartz. *N. Act. Ups.* 6. 70.

C. "caule dichotomo vaginis undique imbricato apice axillisque bulbifero, bulbis 1-phyllis, floribus confertis e vaginis caulis." Swartz. *Fl. Ind. Occ.* 3. 1448.

*Camaridium purpureum.* Spreng. *Syst.* 3. 735.

*Epidendrum vestitum.* Swartz. *Prodr.* 124.

Hab. in arboribus *Jamaicæ temperatoris*, nec non ad latera rupium ; Swartz.

Folium sessile, lato-lanceolatum, submembranaceum, integrum, rigidum. Flores minuti, purpurei. Sepala et petala subæqualia : hæc paulò angustiora, ovato-lanceolata, concava, subpatentia. Labellum petalis dimidio minus, deltoideum, infernè angustius, convexum, callo bifido columnæ basi approximatum, medio concavum, subreflexum, angulis marginalibus erectiusculis, apice attenuatum obtusum. Capsula ovata, parva, sub-3-gona, 3-carinata. *Ex Swartz.*

28. *CYMBIDIUM ochroleucum.*

C. caulescens, axillis pseudobulbiferum, foliis ligulatis carinatis apice oblique emarginatis, floribus solitariis axillaribus, sepalis petalisque æqualiter patentibus lineari-oblongis subspatulatis acutiusculis, labello cucullato trilobo disco barbato.

*Camaridium ochroleucum.* Lindl. in *Bot. Reg.* 844.

Hab. in insula *Trinitatis.* (v. v. c.)

Columna libera, erecta, semiteres. Stigma fornicatum, rotundatum. Anthera semibilocularis. Poll. 4, compressa, parallela, caudiculâ ovatâ, glandulâ sublunatâ.

29. ? *CYMBIDIUM glandulosum.* Humb. et Kunth. *N. G. et Sp.* 1. 340.

C. "bulbo oblongo, foliis latè linearibus acutis, pedunculo paucifloro pedicellisque glandulosis, calycis foliolis spathulatis, labello trilobo : lobo intermedio emarginato."

Hab. in crepidinibus opacatis montis Avila v. Silla de *Caracas*, alt. 1280 hexap. florens Februario ; Humb. et Bonpl.

Epiphyta. Folia coriacea, subsempoll., vix 4 lin. lata. Scapus sub5-poll. Flores 3-4, concolores, exsiccati aurantiaci. Sepala et petala spatulata, acuta, reticulato-venosa,  $\frac{1}{2}$  poll. Labellum brevius, trilobum, basi concavum columnam involvens ; lobo intermedio lateralibus majore subrotundo planiusculo. Pollinia ignota. *Ex Kunth.*

30. ? *CYMBIDIUM candidum.* Humb. et Kunth. *N. G. et Sp. Pl.* 1. 342.

C. "bulbo oblongo, foliis lineari-oblongis obtusis, pedunculo bifloro, calycis foliolis exterioribus lanceolato-oblongis interioribus subrotundo-ovatis crenulatis, labello trilobo : lobo intermedio subrotundo emarginato crenulato."

Hab. ad truncos *Uvariæ* prope urbem *Carthaginem Popayanensium*, in convalli fluminis *Caucæ*, alt. 470 hexap. florens Septembri ; Humb. et Bonpl.

Folia coriacea, nervoso-striata, sub 8-poll., 2 poll. ferè lata. Flores candidi. Sepala acuta, bipollicaria et longiora. Petala paulò longiora et

tenuiora. Labellum canaliculatum, lineis roseis pictum, basi flavescens, lobo intermedio violaceo. Pollinia 4, pedicellata, subrotunda, cereacea. *Ex Kunth.*

Certainly not a *Cymbidium*, if the Pollen is rightly described.

31. ? *CYMBIDIUM cordigerum*. *Humb. et Kunth. N. G. et Sp.* 1. 341.

C. "bulbo oblongo, foliis lineari-lanceolatis obtusis, pedunculo paucifloro, calycis foliolis spathulatis, labello trilobo: lobo intermedio obcordato subcrenulato."

Hab. regione ferventissimâ Provinciæ *Venezuelæ*, inter Santa Barbara, et Porto Cabello, alt. 85 hexap. florens Februario; *Humb. et Bonpl.*

Epiphyta. Folia coriacea, vix pedalia, poll. lata. Scapus pedalis. Flores circiter 6. Flores patentes, purpurei? Sepala et petala acutiuscula, nervosa, subpollicaria. Labellum longius, lobis lateralibus obliquè ovatis obtusis, intermedio maximo plano, exsiccato aurantiaco basin versus purpureo. Pollinia ignota. *Ex Kunth.*

§. 4. *Rhizoma repens, pseudobulbos 1-2-phyllous gerens.* (*BOLBIDIUM*.)—An hujus loci *Maxillaria picta* aliæque?

32. *CYMBIDIUM diurnum*. *Swartz. in Schrad. Diar. Bot.* 1799. 221. *Willd.* 4. 106.

C. pseudobulbis ovatis diphyllis, foliis coriaceis lineari-oblongis rectis obtusis, scapo terminali paniculato multifloro, sepalis petalisque patentibus subæqualibus, labelli trilobi axi carinatâ lobis lateralibus erectis abbreviatis acutis membranaceis dentatis intermedio unguiculato obovato-oblongo bilobo convexo marginibus revolutis.

*Limodorum diurnum.* *Jacq. Ic. Rar.* 3. t. 603.

Hab. in *Bahamis*; *Hooker*, in arboribus ad *Caraccas*, *Jacquin.* (*exam. s. sp. in herb. Hooker.*)

Pseudobulbus 1½ poll. long. Folia 8-poll. Scapus bipedalis. Sepala concava; petala plana obtusiora. Labelli lacinie laterales columnam amplectentes eoque paulò longiores. Labellum ecristatum, basi cum columna subparallelum, postea patentissimum. Columna utrinque marginato-alata. Clinandrium utrinque marginatum denticulatum. Pollinia 2, obscurè visa.

If *Jacquin's* figure be correct in the form of the labellum, then the plant I have described from *Dr. Hooker's* herbarium must be a different species; but I am rather inclined to think that the figure is unfaithful.

33? *CYMBIDIUM trinerve.* *Meyer Esseq.* 258.

C. "foliis radicalibus lineari-lanceolatis trinervibus; scapo paniculato, bracteis petalisque margine crispato-undulatis, labelli lobo medio latiore emarginato."

Hab. in *Essequibo*, in locis altis arenosis regionis rivi *Arowabischkreek*; *Meyer.* Floret Octobre.

Planta 4-5-pedalis, glaberrima. Folia membranacea, firma, basi invicem se amplectentia et imbricata, alterna, disticha, lineari-lanceolata, acuminata, infernè carinata, trinervata, lineata. Scapus erectus, teres, panicula subpedali terminatus. Rami paniculæ alterni, adscendentes, simplices. Bracteæ ad ramorum pedicellorumque basin singulæ, uncinales, oblongæ, acuminatæ, margine crispato-undulatæ, una cum corolla nervato-reticulatæ et coloratæ. Flores alterni, remoti, pedicellis semi-

pollicaribus unifloris suffulti. Calycis foliola patentia, oblonga, acuta, undulata, e fusco lutea. Labellum calycis foliolis duplò brevius, quadrato-subrotundum, sulphureum; laminâ trilobâ, lobis rotundatis, intermedio planiusculo emarginato, lateralibus adscendentibus, triplò minoribus, integrisque. Gynostemum petalis duplò brevius, adscendens, anticè concavum. Capsula prismatica, nitida. *Meyer.*

34. *CYMBIDIUM marginatum.* *Lindl. in Bot. Reg.* 1530.

C. pseudo-bulbis ovato-oblongis teretibus 1-3-phyllis, foliis lineari-lanceolatis coriaceis erecto-recurvis, scapis unifloris gracilibus vaginatis foliis brevioribus, sepalis oblongo-lanceolatis, petalis minoribus conformibus, labello oblongo-lanceolato obtuso cucullato subrependo indiviso.

? *Maxillaria gracilis.* *Lodd. Bot. Cab. t.* 1837.

? *Bletia humilis.* *Link. et Otto. Neu. et Selt. Gewächse. t.* 27.

Hab. in *Brasilia*, prope Rio Janeiro; ? etiam in *Mexico*; *Deppe. (v. v. c.)*

Folia 4-8 poll. longa, 6-7 lineas lata, atroviridia. Scapi palmares, vaginis longis fuscis distantibus. Flores lutei. Sepala pollicem longa, rubromarginata; supremum cum petalis parallelum labium superius, lateralibus divergentibus inferius constituentibus. Labellum interruptè umbrino-limbatum.

The *Maxillaria gracilis* of Mr. Loddiges is either a sickly specimen of this, or a nearly allied species. It may be the same as *Bletia humilis* of Link and Otto, a plant I have never seen, but which is most likely another species, very nearly related to this.

35. *CYMBIDIUM Javanicum.* *Blume Bijdr.* 380.

C. "bulbis cauliformibus teretibus 3-foliatis, foliis lineari-lanceolatis acuminatissimis membranaceis, spicâ laterali pauciflorâ, labello intus carinato."

Hab. in *Java* ad radices arborum in sylvis montium *Seribu*; *Blume.*

Sepala lineari-oblonga, acuta, patentia, diaphano-albicantia, interiora labellumque purpurascens-maculata. Pollinia ovalia v. subglobosa. *Bl.*

This perhaps belongs to the *Eucymbidia*, near *C. lancifolium*.

36. *CYMBIDIUM cuspidatum.* *Blume Bijdr.* 379.

C. "bulbis ovato-oblongis compressiusculis sub-4-phyllis, foliis lineari-lanceolatis cuspidatis coriaceis, spicâ radicali 3-5-florâ, labello intus carinato medio bicalloso."

Hab. in *Javæ* montanis *Salak* et *Tjerimai*; *Blume.*

Sepala oblonga, acuminata, pallidè flavescentia, lineis purpurascens notata, duobus lateralibus exterioribus arcuato-conniventibus. Massæ pollinis ovals v. subglobosæ. *Bl.*

§. 5 *Acaulia, tuberosa, foliis plicatis, columnâ alata, labello nudo, pollinibus 2 integris. (ANGIDIUM.)*

37. *CYMBIDIUM utriculatum.* *Swartz. Nov. Act. Ups.* 6. 75. *Willd. Sp. Pl.* 107. *Swartz. Fl. Ind. Occ.* 1477.

*Limodorum utriculatum.* *Swartz. Prodr.* 119. *Jacq. Fragm. Bot.* 29. t. 32. f. 4.

Hab. in sylvis subhumidis *Jamaicæ*, *Swartz*, *Macfadgen*; *Hispaniolæ*, *Swartz. (v. s. sp. in herb. Hooker.)*

Verosimiliter est genus distinctissimum; sed exempl. manca in herb. Hooker. quæ solum vidi, non mihi omnino satisfaciunt. Hæc tamen vidi, columnam alatham, labellum oblongum acutum indivisum elamelatum, pollinia 2, stigma ad apicem columnæ, nec ad basin ut vult cel. Swartzius, scapum erectum foliis longiorem pubescentem. Descriptionem Swartzii subjungo.

Radix tuberosa, subrotunda, difformis, carnosa, succulenta, sæpe magnitudine tuberum maximorum Solani tuberosi. Huic insidet Bulbus subrotundus, vaginis emarcidis vestitus, radiculis filiformibus longis sub bulbo prope tuber exsertis. Folia duo, subpedalia, lato-lanceolata, acuta, integra, longitudinaliter plicato-nervosa; utrinque glabra; basi cincta vaginis alternis, quarum una magna, elongata, medio valde ventricosa, apice acuminata, interdum bifida, glabra, lineato-nervosa, copia aquæ limpida plerumque distenta. Scapus e radice intra vaginam inflatam, foliis duplò longior, teres, crassitie calami scriptorii, vaginulis aliquot remotis arctis cinctus. Flores terminales, alterni, distantes, sessiles, majusculi, albi, succulenti, hinc facillimè decidui. Bractæ lanceolatae, breves, sub floribus. Petala 5, supremum exterius concavum, cum duobus interioribus lanceolatis falcatis in galeam quasi connivens: lateralia exteriora apice ad superiora approximata, falcata, basi anticè gibba. Labellum basi latum, ovato-concavum; lamina erecta, apice subrecurva obtusa, tribus maculis purpureis notata. Columna erecta, petalis paullulum brevior, gibba, anticè excavata, purpureo-fasciata; apice in fovea præbens Antheram subconicam, quadrilocularem, globulis pollinis solitariis, subrotundis, flavis. Germen cylindricum, contortum. Stigma ad basin columnæ labello oppositum. Capsula magna, oblonga, basi et apice acuminata et torta, tricarinata, 6-sulcata.

† *Species omnino dubia.*

38. CYMBIDIUM vexilliferum. *Llave et Lexars. Nov. Veg. Descr. 2. 11.*

“Planta terrestris, vix pedalis. Radix tuberosa, bulbo unico oblongo tunicato, fibrillis capillaribus ad collum tecta; radiculae simplices vermiformes. Folia radicalia lanceolato-ovata, nervosa, lævigata, vaginantia. Scapus Squeter, angulis decurrentibus, floribus spicâ diffusâ ordinatis, cernuis. Bractæ lineares, acutæ, amplexicaules. Perigonium herbaceo-membranaceum, luridum, segmentis 3 externis lato-lanceolatis, duobus interioribus lineari-elongatis, omnibus patentibus marginibus revolutis. Labellum magnum, ovatum, carinatum, purpureo-fuscum, venosum, ad marscescentiam nigricans, vexillum papilionacearum æmulans, limbo integerrimo. Gynostemium conico-incurvum, anticè canaliculatum, ad apicem incrassatum, auriculis 2 carnosissimis foveam stigmatiæ concludentibus. Anthera opercularis caduca. Pollinis massæ 4, ovatae, pedicello brevi glutinoso affixæ. Operculum petaloideum, reniforme, biloculare, herbaceum.”

Habitat in montibus *Vallisoletanis*.

Verosimiliter genus distinctum. An *Cremastræ* species?

39. CYMBIDIUM tabulare. *Willd. Sp. Pl. 4. 37. Thunb. Fl. Cap. 70.*

*Satyrium tabulare. Linn. Suppl. p. 403.*

*Serapias tabularis. Thunb. Prodr. Fl. Cap. 3.*

Hab. ad C. B. S. in planitiem montis tabularis prope frontem; floret Januario; Thunberg.

*Radix bulbosa. Folium radicale, solitarium, lineare, patens, glabrum, digitale. Scapus flexuosus erectus, striatus, vix pedalis. Vaginæ in scapo binæ v. 3. Flores circiter 5, cernui. Bractea sub singulo flore lanceolata, capsulâ brevior. Corolla irregularis, virescens, 5-petala; tria exteriora consimilia, ovata, obtusa, venosa, concava, erecta, unguicularia; lateralìa basi anticè ad latera labelli parùm producta; duo interiora vix angustiora, subpatentia. Labellum totum flavum, reliquis petalis latius, et paulò brevius, convoluto-concavum, obtusissimum, tripartitum, lacinia ovata integræ; intermedia concava, subinde brevior, excisa. Thunb.*

40. *CYMBIDIUM montanum. Swartz. Nov. Act. Ups. 6. 72.*

C. "caule simpliciusculo, foliis lato-lanceolatis apice subrecurvis, racemo terminali, floribus secundis, lamina labelli trifida." *Swartz. Fl. Ind. Occ. 3. 1469.*

*Epidendrum montanum. Swartz Prodr. 121.*

Hab. in arboribus in montibus cæruleis *Jamaicæ australis*; *Swartz.*

Caulis 1-2-pedalis, simplicissimus, teres, infernè aphyllus, vaginatus, geniculatus, ad genicula infima subdivisus, supernè foliosus. Racemus  $\frac{1}{2}$  pedalis, flexuosus, compressus, multiflorus. Flores albi. Bracteæ cucullatæ. Sepala et petala ovato-lanceolata, concava, patentia. Labellum cymbiforme, lacinia intermediâ longiore, medio sanguineo-punctatâ. *Ex Swartz.*

#### XCVIII. ACROPERA.

Sepala patentia, supremum galeatum, lateralìa divaricata. Petala nana, obliqua, apice truncata, subpatentia. Labellum unguiculatum, cum basi columnæ elasticè articulatam, trilobum, lobo intermedio minore saccato. Columna erecta, marginata, basi saccata. Pollinia 2, linearia, convoluta, caudiculâ lineari-subulatâ, glandulâ minutâ. Rostellum subulatum.—Epiphyta, racemis cernuis multifloris, vegetatione *Maxillariæ Colacis*.

This genus is very near *Maxillaria*, from which however its curious labellum, and stunted petals sufficiently distinguish it.

##### 1. *ACROPERA Loddigesii.*

*Maxillaria galeata. Lindl. in Lodd. Bot. Cab. t. 1645.*

Hab. in *Mexico* prope *Xalapa*, *Loddiges. (v. v. c. comm. amic. Loddiges.)* floret Julio.

Flores fusco-crocei. Labellum rubescens ob elasticitatem unguis ligulati semper vacillat. Ovarium cylindraceum, viridi-purpureum, subspiraliter convolutum.

#### XCIX. CREMASTRA.

Perianthium tubulosum, apice patens. Sepala et petala angusta, subæqualia, omninò libera. Labellum longè unguiculatum, cum columna parallelum, apice dilatatum 3-fidum: appendice ad basin limbi carnosò, naviculari, ascendente. Columna longissima, semiteres, erecta, libera. Pollinia (4, ovata, plana, glandulâ dilatatâ. *Wallich.*)—Terrestris; pseudobulbis annulatis, aggregatis. Folia membranacea, subplicata.

1. *CREMASTRA Wallichiana*. Lindl. in *Wall. Cat.* no. 7349.

*Cymbidium appendiculatum*. Don. *Prodr.* 36.

Hab. in *Napalia*, ad *Sheopore*, supra arbores et rupes. *Wallich*. (*hab. s. sp. e Mus. Angl. Ind.*)

Bulbi magni, globosi, fasciculati, subannulati, pollicares. Folia oblongo-lanceolata, in petiololum angustata, acuminata, tricostata, striata, pergamenea. Scapus 1-1½-pedalis, striatus, vaginatus. Flores sesquipollicares, racemosi, congesti, penduli, cylindracei, apicibus recurvis, Hyacinthum simulant, rosei, labello intus purpureo maculato.

### C. GRAMMATOPHYLLUM.

*Grammatophyllum*. *Blume Bijdr.* 377. tabellen 20.—*Gabertia*. *Gaudich. Voyage.* 425.

Perianthium explanatum, patens, sepalis petalisque subæqualibus. Label-  
lum cum columnâ articulatam, nanum, trilobum, cucullatum. Columna  
arcuata, erecta, semiteres, basi callosa. Anthera subbilocularis. Pol-  
linia 2, globosa, basi sulcata, in extremitatibus glandulæ arcuatæ ses-  
silia—Herba epiphyta, caulescens. Caules simplices incrassati. Folia  
linearia, disticha, striata. Pedunculi radicales, longissimi, (v. termi-  
nales ?) multiflori. Flores speciosissimi.

*Cymbidio* differt tantum pollinibus et glandulâ.

1. *GRAMMATOPHYLLUM speciosum*. *Blume Bijdr.* 377.

G. caule carnoso, foliis ensiformibus plicatis, scapis radicalibus.

*Angræcum scriptum*. *Rumph. Amb.* 6. 95. t. 42.

*Epidendrum scriptum*. *Lin. Sp. Pl.* 1351.

*Cymb. scriptum*. *Swartz. in Schrad. Diar.* 1799. p. 218. *Willd. Sp. Pl.* 4. 100.

*Gabertia scripta*. *Gaudich. Voy.* 425.

Hab. in *Java* circa *Buitenzorg* in arboribus, *Blume*; in *Amboyna*, *Rum-*  
*phius*; in *Moluccis*, supra rupes nudos, *Gaudichand*; in freti *Malaccen-*  
*sis insula Pulo Dinding, Finlayson*. (*hab. s. sp. e Mus. Angl. Ind.*)

An diversæ species hic confusæ ?

Caulis erectus simplex foliosus. Folia lanceolata, acuta, disticha, paten-  
tissima, 9-15-striata, plana, membranacea. Scapus erectus, longissi-  
mus, multiflorus. Flores luteo-virides, brunneo maculati; laciniis  
obovatis. Fructus succulentus. *Gaudich.*

2. *GRAMMATOPHYLLUM ? Finlaysonianum*. Lindl. in *Wall. Cat.* no. 7561.

G. caule cylindraceo striato, foliis distichis emarginatis basi latioribus,  
racemis terminalibus longè pedunculatis, bracteis distichis confertis  
ovatis concavis acutis rigidis.

Hab. in *Singapore, Finlayson, Wallich*; (*hab. s. sp. deflorat. e Mus. Angl. Ind.*)

Herba facie *Epidendri elongati* Folia 4 poll. longa. Racemi 2½ polli-  
cares. Flores duos inspexi quorum unus apertus, alter alabastrus,  
ambo vermibus destructi. Ex his judico Perianthium explanatum, 2  
pollices latum; sepalâ lanceolata, æqualia; petalâ ascendentiâ duplò  
latiora; labellum liberum, columnâ articulatam, cucullatum, 3-lobum,  
appendicibus cristisve nullis, nisi in discum laciniæ intermediæ ubi  
tuberculosum; columnam erectam semiteretem, membranaceo-margi-  
natam, basi nullo modo productam; antheram bilocularem; pollinia 2,  
posticè excavata. Glandulam vix vidi.



## CI. TRICHOCEROS.

*Trichoceros. Humb. et Kunth. Nov. Gen. et Sp. 1. 338.*

Perianthium explanatum, regulare, petalis sepalis labelloque subconformibus, Columna nana, villosa, utrinque processu petaloideo piloso instructa; rostello acuminato. Anthera unilocularis? ad dorsum rostellii. Pollinia 2, solida, obovata, caudiculâ unicâ elongatâ.—Herbæ epiphytæ, pseudobulbosæ, caulescentes. Scapi distanter vaginati, multiflori. Flores mediocres.

1. *TRICHOCEROS parviflorus. Humb. et Kunth. N. G. et Sp. Pl. 1. 337. t. 76.*

T. processubus columnæ linearibus ascendentibus exannulatis sepalis paulò brevioribus.

Hab. in faucibus *Andium Novogranatensium*, juxta ripam fluminis Xayo et confluentem Sambingi, ubi sylvæ humidis flatibus perstringuntur neque solis foveantur radiis alt. 1118 hexap. floret Novembri; Humboldt et Bonpl.

Planta parasitica. Caules teretes, glabri, subpedales, basi foliati, apice pauciflori. Pseudobulbi oblongi, glabri, virescentes. Folia oblongo-lanceolata, acuminata, plana, coriacea, glabra, basi vaginantia, bipollicaria, 6 aut 7 lin. lata. Flores subspicati, pedicellati, bracteati; bractea ovata, acuminata, striata, membranacea, glabra. Perianthium patens, glaber, exsiccatus flavescens; sepala subæqualia, oblonga, acuta, flaviuscula, 5-venia, 5-lineas longa; petala simillima, paulò minora. Labellum oblongum, acutum, magnitudine sepalorum, 7-venium, planiusculum, ciliatum, internis præsertim basin versus pilis violaceis tectum. Columna brevis, violaceo-pilosum, utroque latere processubus linearibus, pilosis, membranaceis, ascendentibus, non annulatis, calyce paulò brevioribus. *Kunth l. c. quibusdam mutatis.*

2. *TRICHOCEROS antennifer. Humb. et Kunth. N. G. et Sp. Pl. 1. 338.*

T. processubus columnæ annulatis arcuatis antennæformibus.

*Epidendrum antenniferum. Humb. et Bonpl. Pl. Æq. 1. 98. t. 28.*  
*Flor de Mosquito Incolarum.*

Hab. in temperatis subfrigidis regni *Quitensis*, prope *Cuenca*, alt. 1351 hexap. florens Julio; Humboldt et Bonpl.

Planta parasitica. Pseudobulbi ovati, compressi, glabri. Folia et caulis præcedentis. Spica 6-9-flora. Flores paralleli, bracteati, iis proximè antecedentis duplò majores. Perianthium patens, glabrum. Sepala oblonga, acuta, interiùs violaceo punctata, exteriùs viridia; petala paulò minora. Labellum oblongum, violaceo punctatum. Processus antenniformes 2, arcuati, annulati; annuli albi, glabri, cum violaceis pilosis alternantes. *Kunth.*

3. *TRICHOCEROS muralis.*

T. processubus columnæ oblongis obtusis planis sepalis duplò brevioribus.

Hab. in *Peruvia*, ad *Cuenca*, supra muros; *Jamieson. (hab. s. sp. comm. cel. Hooker.)*

Caulis ascendens, brevis. Folia brevia, oblonga, carnosa, densa, cuspidata. Scapus gracilis, erectus, 4 p. longus, distanter squamatus. Racemus brevis, corymbosus. Sepala ovata, acuta. Petala conformia, basi ciliata. Labellum oblongum, obtusum, sepalis longius, basi pilosissimum, cum columna nana alata villosa continuum; processus petaloidei oblongi, obtusi, patentissimi, plani.

## CII. GEODORUM.

Geodorum. *Jackson in Bot. Repos.* 626. (1810.) *Brown in Hort. Kew. ed. 2. 5. 207.*—*Cistella. Blume Bijdr.* 293. tabellen 55.—*Otandra. Salisb. in Hort. Trans.* 1. 261. (1812)

Perianthium connivens, sepalis petalisque liberis, subsecundis, subæqualibus. Labellum cucullato-ventricosum, sessile, cum columna non articulatum, versus basin saccatum. Columna brevis, erecta, semiteres. Anthera bilabiata. Pollinia 2, posticè biloba, caudiculâ brevissimâ, glandulâ transversâ.—Herbæ terrestres, tuberosæ. Folia plicata. Racemi apice recurvi.

The species of this very natural genus require to be all re-examined in a fresh state. I have adopted Dr. Brown's definitions in the Hortus Kewensis without, however, being entirely satisfied with them.

1. *GEODORUM purpureum.* *R. Br. in Hort. Kew. ed. 2. 5. 207.*

G. scapo foliis longiore, racemo pendulo, floribus alternis, labello ovato acuto picto. *R. Br. l. c.*

*Limodorum nutans. Roxb. Corom.* 1. t. 40.

*Malaxis nutans. Willd. Sp. Pl.* 4. 93.

Hab. in *India Orientali*, in convallibus humidis montosis, florens sub initio temporis pluviosi; Roxburgh.

2. *GEODORUM pictum.*

G. "racemo pendulo multifloro, bracteis lineari-lanceolatis ovaria subæquantibus, labello ovato retuso picto: callo disci ovato apice soluto dentato, foliis lanceolato-oblongis."

*Cymbid. pictum. Brown Prodr.* 331.

Hab. in *Nova Hollandia tropica*; R. Brown.

Verosimiliter idem ac *G. purpureum*.

3. *GEODORUM dilatatum.* *R. Br. in H. Kew. ed. 2. 5. 207.*

G. scapo foliis brevior, spicâ pendulâ, floribus congestis, labello subcalcarato apice dilatato crenulato. *R. Br. l. c.*

*Bela-Pala. Rheede H. Malab.* 11. t. 25.

*Limodorum recurvum. Roxb. Corom.* 1. t. 39. *Swartz Nov. Act. Ups.* 6. 79. *Willd. Sp. Pl.* 4. 124.

*Malaxis cernua. Willd. Sp. Pl.* 4. 93.

*Otandra cernua. Salisb. in Hort. Trans.* 1. 261.

*Cistella cernua. Blume Bijdr.* 293. t. 55.

Hab. in *India Orientali* cum *G. purpureo*, Roxburgh; *Sylhet, Wallich; Java*, Blume. (*hab. s. sp. e Mus. Angl. Ind.*)

Folia oblonga, basi parùm angustata. Flores carnei venis roseis picti.

Jan. 1833.

4. *GEODORUM pallidum*. *Don Prodr.* 31.

G. scapo foliis brevior, spicâ congestâ nutante, labello basi saccato ovato integerrimo cucullato.

*Limodorum candidum*. *Roxb. MSS.*

*Geodorum candidum*. *Wall. Cat. no. 7374.*

Hab. in *Sylhet*, *Roxburgh*; *Moalmayne, Wallich*. (*hab. s. sp. e Mus. Angl. Ind.*)

Habitus omninò G. dilatati. An mera varietas?

5. *GEODORUM citrinum*. *Jackson in Bot. Rep.* t. 626.

G. scapo foliis brevior, spicâ pendulâ, floribus congestis, labello basi subcalcarato apice obtuso integerrimo. *R. Br. in Hort. Kew.* 5. 207.

Hab. in *India Orientali*; in provincia *Chittagong, Wallich*: (*hab. s. sp. e Mus. Angl. Ind.*)

Folia basi angustata. Labellum integerrimum. Flores citrini.

## CIII. SOBRALIA.

*Sobralia*. *Fl. Peruv. Prodr.* 120. t. 26. *Lindl. Coll. Bot.* p. 33.

Perianthium maximum, subcarnosum, explanatum, patens. Sepala et petala subæqualia. Labellum cucullatum, columnam involvens, basi angustatum, bilobum. Columna erecta, elongata, marginata, clavata, apice utrinque alata. Anthera bilocularis: loculis connectivo lato discretis. (Pollinia 2, caudiculâ lineari. *ex Fl. Peruv.*)——Herbæ terrestres, altæ, caulescentes. Folia plicata, vaginantia. Flores axillares et terminales, speciosissimi, teneri.

("Plantæ perennes paucis prolibus. Radices fasciculatæ, longissimæ, flexuosæ, lanuginosæ. Caules aut Culmi virgati, orgyales et ultrâ, simplicissimi. Folia vaginantia, lata, nervosa. Pedunculi axillares racemosi. Flores magni, fragrantissimi, purpureo-violacei." *R. et P.*)

1. *SOBRALIA dichotoma*. *Fl. Peruv. Syst.* 232. *Prodr.* t. 26.

S. foliis oblongis acuminatis basi in petiolum brevissimum supra vaginam contractis, racemo axillari flexuoso multifloro, bracteis ovario multò brevioribus, alis columnæ brevibus, labello crispo medio lamellato.

*Tahuetahue vernaculâ.*

Hab. abundè in *Peruvia* nemoribus *Muña, Pozuzo* et *Chinchao* per runcationes in locis calidis et saxosis; *Ruiz et Pavon*. (*v. s. sp. in herb. Lambert.*)

Floret a Junio ad Octobrem.

Florem unicum examinavi ex herb. *Lambert*. Pollinia haud inveni. Lamellæ labelli 5, apice divergentes.

2. *SOBRALIA biflora*. *Fl. Peruv. Syst.* 232.

S. "bulbis fasciculatis, foliis oblongo-lanceolatis acutissimis, culmis bifloris."

Hab. in *Peruvia*, in *Pozuzo* runcationibus et calidis locis, versus *Chenifo* et *Tramo* tractus: *Ruiz et Pavon*.

Floret a Maio ad Septembrem.

3. *SOBRALIA liliastrum*.

*S. foliis lanceolatis acuminatis, racemo brevi terminali flexuoso, bracteis acuminatis ovario longioribus, alis columnæ maximis falcatis.*

*Epidendrum liliastrum. Salzm. Herb. Bah.*

Hab. ad *Bahiam*, in fruticetis sabulosis; *Salzmann. (hab. s. sp.)*

Partes omnes succulentas, exsiccatione contusas, examini ulteriori sub-  
jicere nequivi.

4. *SOBRALIA* ? *Caravata*.

*S. foliis lanceolatis pubescentibus, capitulis imbricatis terminalibus.*

*Caravata-Miri Vernaculè.*

*Serapias Caravata. Aubl. Guian. 2. 816. t. 320.*

*Cymbidium hirsutum. Willd. Sp. Pl. 4. 94.*

Hab. in sylvis *Guianæ* supra arbores; *Aublet.*

Flores lutei.

*Dubiæ.*? 5. *SOBRALIA amplexicaulis. Fl. Peruv. Syst. 233.*

*S. "bulbis fasciculatis, foliis cordatis amplexicaulibus, racemo terminali."*

Hab. affatim in *Peruvia*, in *Chinchao* runcationibus et locis meridionalibus,  
florens à Maio ad Augustum; *Ruiz et Pavon.*

Labellum squamis linearibus apice dilaceratis conspersum. Germen ca-  
lyculo 3-dentato connatum. Folia nervosa venosaque evaginata. *R. et P.*

? 6. Huc etiam fortassè referenda est *Bletia ciliata* *Presl. Reliq. Hænk p.*  
99. quæ *S. dichotoma* esset, si flores majores.

Hab. in *Peruvia*.

CIV. *ACANTHOPHIPPIUM*.

*Acanthophippium. Blume Bijdr. 353. tabellen 47.*

*Perianthium ventricosum. Sepala agglutinata, lateralialia ungui columnæ adnata, dorsali cum petalis spatulatis fornicato. Labellum unguiculatum, cum basi longè producta columnæ elasticè articulatam, limbo trilobo indiviso, complicato: disco lamellato. Anthera carnosa, bilocularis. Pollinia 8, inæqualia, sessilia. — Herba terrestris, subcaulescens. Caulis infernè bulbosus, vaginatus. Folia oblongo-lanceolata, plicata. Pedunculus vaginatus, pauciflorus. Flores speciosi.*

1. *ACANTHOPHIPPIUM Javanicum. Blume l. c.*

*A. petalis triangularibus, labelli lobis lateralibus truncatis, perianthio ovato.*

Hab. in *Java*, in sylvis altioribus montis *Salak*; *Blume*

2. *ACANTHOPHIPPIUM Sylhetense.*

*A. petalis oblongo-lanceolatis acutiusculis, labelli lobis lateralibus acutis, perianthio obovato.*

Hab. in *Sylhet*, *Wallich. (v. ic. pict. e Mus. Angl. Ind.)*

*Caulis spithamæus, basi fusiformis, carnosus. Folia oblongo-lanceolata, plicata. Spica radicalis, triflora, caule multò brevior: squamis magnis, inferioribus foliaceis, vaginatus. Flores 2 poll. longi, albi, inodori. Sepala agglutinata. Lamellæ labelli tres, carnosæ, denticulatæ.*

## CV. DORITIS.

**Perianthium explanatum.** Sepalum supremum et petala obtusa conformia æqualia, lateralia basi valdè obliqua cum ungue longè producta columnæ connata. Labellum deflexum, cum pede columnæ elasticè articulatū, unguiculatū, laminā hastato-trilobā: lineā mediā elevatā. Columna alato-marginata, rostello proboscideo porrecto. Anthera ovata, acuminata. Pollinia 2, posticè biloba, caudiculā subulatā longissimā, glandulā parvā ovatā.—Herba epiphyta, caulescens, radices undique promens. Folia disticha. Spica axillaris, stricta, multiflora.

1. *DORITIS pulcherrima.* Lindl. in Wallich. Cat. no. 7348.

Hab. in *Cochinchina*, ad sinum Turon; Finlayson. (hab. s. sp. e Museo Anglo-Indico.)

Folia oblonga, carnosa,  $3\frac{1}{2}$  p. longa. Spica laxa, ramosa,  $1\frac{1}{2}$ -2-pedalis, multiflora. Sepala anticè ad basin producta, crispata. Labellum ungue canaliculato, sub lamina utrinque 1-dentato: callo parvo inter dentes.

## CVI. CHELONANTHERA.

*Chelonanthera* § 1. Blume Bijdr. 382. tabellen 51.

**Perianthium patens.** Sepala æqualia. Petala linearia. Labellum cum basi columnā articulatū, emarginatū, utrinque dente inflexo auctū. Columna erecta, petaloidea, infra apicem antherifera. Anthera bilocularis, (ex icone 4-valvis, transversè dehiscens). Pollinia 4, cava, hemisphærica, caudiculis 2 filiformibus, glandulā hamatā.—Herbæ epiphytæ, pseudobulbosæ, pedunculis multifloris. Flores bracteati, distichi.

Character ex Blume.

1. *CHELONANTHERA gibbosa.* Blume l. c.

C. "bulbis oblongis quadrangularibus subdiphyllis; foliis lanceolatis, racemis elongatis nutantibus flexuosis, labello medio bidentato."

Hab. in *Java*, in montosis, ubi supra arbores associata est; Blume.

Sepala externa ovalia, recurvata; interiora linearia, patentia. Floret Oct.—Febr. Bl.

2. *CHELONANTHERA ventricosa.* Blume l. c. t. 51.

C. "bulbis oblongis compressiusculis sulcatis diphyllis, foliis lanceolatis nervosis, scapo erecto, labello medio bidenticulato."

Hab. in *Java*, circa flumen Tjapus in monte Salak; Blume.

Sepala exteriora ovata, acuta; lateralia carinata; posticum leviter fornicatū; interna linearia. Floret Sept.—Oct. Bl.

3. *CHELONANTHERA sulphurea.* Blume l. c.

C. "bulbis oblongis trigonis submonophyllis; foliis lanceolatis coriaceis, labello margine infernè utrinque carinato."

Hab. in *Java* circa flumen Tjapus in monte Salak; Blume.

Sepala exteriora oblonga, acuta, carinata, patentia; interna linearia, revoluta. Floret Sept.—Oct. Bl.

## CVII. ACANTHOGLOSSUM.

*Acanthoglossum. Blume Bijdr. 381.*

*Perianthium patulum. Sepala petalis latiora. Labellum basi ventricosum : limbo reflexo-patente, bilobo, internè bicalloso. Columna superne libera, utrinque membranaceo-marginata. Anthera bilocularis, infra-apicularis, rostello emarginato incumbens. Pollinia 4, obovata, glandulâ hamatâ.*  
 —Herba epiphyta, bulbifera, habitu *Chelonantheræ*.

Character ex Blume.

1. *ACANTHOGLOSSUM nervosum. Blume l. c.*

Hab. in *Java*, ad arbores in sylvis altioribus Salak ; Blume.

Floret Octobri.

## CVIII. SUNIPIA.

*Sunipia. Buchanan in Rees Cyclop. sub Steli. Lindl. Orch. scelet.*

*Perianthium ringens. Sepala æqualia, basi discreta ; lateralibus labello suppositis. Petala nana. Labellum posticum, integrum, petalis majus, erectum, (cum columna articulatum ?). Columna nana. Anthera dorso fixa, bilocularis : loculis discretis verticaliter dehiscentibus ! Pollinia 4, per paria caudiculis duabus affixa, glandulâ unicâ. —Herbæ epiphytæ, pseudobulbosæ, monophyllæ. Folia carnosæ. Spicæ radicales, distichæ, multifloræ. Flores parvi, bracteis longis spathaceis stipati.*

1. *SUNIPIA scariosa. Lindl. in Wall. Cat. no. 7373.*

*S. spicis foliis duplè longioribus, floribus bracteis brevioribus, labello ovato basi concavo.*

Hab. in *Napalia, Wallich. (hab. s. sp. e Mus. Angl. Ind. et v. ic. pict.)*

*Folia 4 poll. longa. Bractesæ carinatæ, glumacæ. Flores albi, roseo suffusi. Sepala ovata, obtusa. Petala triplè breviora, rotundata. Labellum glaberrimum, ovatum, acuminatum, obtusum.*

2. *SUNIPIA bicolor.*

*S. racemis foliis subæqualibus, floribus bracteis longioribus, labello obovato apiculato serrulato-ciliato.*

Hab. in *Napalia, Wallich. (v. ic. pict. e Mus. Angl. Ind.)*

*Præcedente triplè minor. Folia atriora. Pseudobulbi subglobosi. Bractesæ ovatæ, acuminatæ. Sepala alba, ovato-lanceolata, acuminata, basi venis 3 purpureis ; lateralibus longiora, agglutinata. Petala alba, ovata, obtusa, duplè breviora. Labellum atropurpureum, obovatum, utrinque serrulato-ciliatum, apiculo obtuso glabro ad apicem.*

## CIX. CALYPSO.

*Calypso. Salisb. Paradis. 89.—Cythera. Ib. in Hort. Trans. 1. 301.—Norna. Wahl. Fl. Suec. 561.—Orchidium. Swartz in Svensk. Bot. 518.*

*Perianthium patens, æquale, secundum. Labellum concavum, sub apice saccatum, trilobum : lobis lateralibus connatis intermedio dilatato barbato suppositis. Columna erecta, petaloidea. Anthera infra-apicularis,*

bilocularis. Pollinia 2, bipartita, incumbentia, in glandulam membranaceam, subquadratam, transversam sessilia.—Herba terrestris, bulbosa. Folia solitaria, plicata. Flos terminalis, solitarius, speciosus.

1. *Calypso borealis*. *Salisb. Parad. Lond. t. 89.*

*Cypripedium bulbosum*. *Linn. Sp. Pl. 1347.*

*Limodorum boreale*. *Willd. Sp. Pl. 4. 123.*

*Cymbidium boreale*. *Swartz in Nov. Act. Ups. 6. 76.*

*Calypso borealis*. *Hook. Ex Fl. t. 12. Id. Bot. Mag. t. 2763.*

*Calypso americana*. *R. Brown in Hort. Kew. 5. 208.*

*Orchidium boreale*. *Swartz in Svensk. Bot. t. 518.*

*Norna borealis*. *Wahlenb. Fl. Suec. 561.*

Hab. per omnes regiones septentrionales *Europæ, Asiæ* et *Americæ* in pratis collinis apricis inter lucos lætiores. (v. v. c. et hab. s. sp.)

Dr. Hooker is certainly right in considering the American, European and Asiatic plants as the same.

## CX. EULOPHIA.

*Eulophia*. *R. Brown in Bot. Reg. t. 686. (Feb. 1823.)*—*Eulophus*. *Idem in Bot. Reg. 578. (Oct. 1821) absque char.*

Perianthium explanatum, sepalis petalisque ascendentibus, subæqualibus, aut omnino liberis, aut cum ungue magis minusve producto columnæ connatis. Labellum cornutum, aut brevis calcaratum, sessile, venis cristatis, barbatis v. omnino lævibus; sæpius trilobum, nunc indivisum. Columna semiteres, marginata. Anthera 1-2-locularis. Pollinia 2, posticè biloba, v. cava, caudiculâ lineari brevi, glandulâ transversâ.—Herbæ terrestres, pseudobulbosæ. Folia longa, membranacea, plicata, v. pluries costata. Scapi radicales, multiflori.

§ 1. *Genuinæ*. Folia plicata coterporanea.

§ 2. *Desciscentes*. Folia equitantia.

§ 3. *Aphyllæ*. Folia serotina. Flores penduli secundi.

† Species dubiæ.

### § I. *Genuinæ*. Folia plicata coterporanea.

#### 1. *EULOPHIA* explanata.

*E. foliis* . . . . . racemo stricto laxo multifloro, sepalis patentissimis petalis oblongis angustioribus, labello ovato obtuso subundulato concavo brevissimè calcarato: lamellis basi conniventibus dilatatis apice divergentibus decrescentibus: duabus intermediis parallelis contiguis.

Hab. in *Zeylona, Macrae*. (hab. s. sp.)

#### 2. *EULOPHIA* nuda. *Lindl. in Wall. Cat. no. 7371.*

*E. foliis* lanceolatis acuminatis, racemo paucifloro laxo secundo foliis longiore, sepalis petalisque lineari-oblongis obtusis, labello oblongo obtuso subundulato nudo basi brevissimè calcarato.

*Dipodium Roniate*. *Hamilt. Mss.*

Hab. in *India Orientali*, in colles Morang; *Hamilton*. (hab. s. sp. e *Mus. Angl. Ind.*)

#### 3. *EULOPHIA* bracteosa. *Lindl. in Wallich. Cat. no. 7366.*

*E. foliis* oblongo-lanceolatis plicatis scapo terminali longioribus, bracteis foliaceis floribus subæqualibus, sepalis petalisque (latioribus) carnosius ob-

longis acutis, labello oblongo canaliculato apice retuso undulato elevato venoso versus apicem glanduloso-barbato, calcare infracto tumido acutiusculo.

Hab. in *Ind. Or.* provincia Chittagong, *Wallich.* (*hab. s. sp. e Mus. Angl. Ind.*)

4. *EULOPHIA grandiflora.*

*E.* foliis lanceolatis plicatis, scapi vaginis longissimis laxiusculis acutis internodiis longioribus, bracteis acuminatis ovario longioribus, sepalis carnosis oblongis undulatis acutis, petalis retusis, labello oblongo subrependo basi angustato apice concavo disco subapice glanduloso, calcare inflexo obtuso.

Hab. in *Zeylona*; *Macrae.* (*hab. s. sp.*)

Ex habitu cum *E. bracteosa* consociatur. Sed nescio an scapi revera sint terminales.

5. *EULOPHIA Promensis.* *Lindl. in Wall. Cat. no. 7365.*

*E.* folio unico longè petiolato lineari-lanceolato scapo radicali longiore, sepalis concavis oblongis acutiusculis, petalis conformibus brevioribus obtusis, labello oblongo medio constricto basi ventricosus utrinque tumido sub apice rotundato plano processibus pluribus aggregatis carnosus truncatis munito, calcare brevi recto tumido acutiusculo.

Hab. in collibus *Promensibus*; *Wallich.* (*exam. s. sp. in herb. soc. Linn.*)

6. *EULOPHIA guineensis.* *Bot. Reg. t. 686.*

*E.* foliis latis oblongis acutis in petiolum angustatis, scapo laxo multifloro, bracteis ovario longioribus, sepalis petalisque lineari-lanceolatis acutis, labelli cucullati lobis lateralibus abbreviatis: intermedio ovato subundulato obtuso majore infra lineis pluribus elevatis verruculatis inscripto, calcare ascendente apice incurvo.

Hab. in *Sierra Leone.* (*v. v. c.*)

Sepala et petala viridia, purpureo venosa. Labellum album, venis quibusdam roseis striatum, basi compressum, cum columna semiconnatum. Anthera ad cardinem biaurita.

7. *EULOPHIA articulata.*

*E.* pseudobulbis articulatis connatis, foliis . . . . , scapo multifloro, racemo elongato, sepalis reflexis petalisque patentibus contortis, labelli trilobi lobo medio ovato obtuso deflexo margine crispo: disco lineis callosis crispis rugosissimo basi tuberculato.

*Jangkosno vernaculè.*

*Limodorum articulatum.* *Schumacher. Fl. Guin. 2. 173.*

Hab. in *Guinea*, passim, *Thonning.*

Flores incarnati, labello violaceo. Scapus 2-4-pedalis.

8. *EULOPHIA concolor.*

*E.* foliis brevibus oblongis acutis concavis laxè vaginantibus, racemo terminali flexuoso paucifloro subcorymboso, sepalis petalisque oblongis acutis, labelli trilobi lobis lateralibus ascendentibus acutis intermedio convexo oblongo crenato crispato, calcare recto conico.

*Limodorum concolor.* *Thouars Orch. Afr. t. 45.*

Hab. in *Borbonia*; *Thouars.*

Flores lutescentes; *Th.*



9. *EULOPHIA herbacea.*

*E. foliis oblongo-lanceolatis acutis scapo erecto brevioribus, racemo secundo, sepalis herbaceis ovato-lanceolatis acutis, petalis brevioribus oblongis obtusis acutisve, labelli trilobi lobis lateralibus abbreviatis intermedio oblongo subundulato: venis omnibus pubescentibus, calcare brevi tereti obtuso.*

*Hab. in Zeylona, Macrae; in India septentrionali, ad ripas fluminis Giree, intra seriem montium Suen, necnon ad ripas Agurwal in faciem septentr. orient. montium Mussooree in convalibus calidis, florens Augusto, tempore pluvioso, Royle. (hab. s. sp. et v. ic. pict.)*

*Folia juniora angusto-lanceolata, adulta, latiora, nitida plana, 5-costata. Sepala viridia, petalis labelloque candidis; ex ic. Royle.*

10. *EULOPHIA lurida.*

*E. foliis lineari-lanceolatis scapo ramoso multò brevioribus, bracteis minimis subulatis, sepalis lineari-spathulatis obtusis, petalis paulò latioribus, labelli tripartiti basi callosi lobis lateralibus obtusis recurvis: intermedio obcordato, calcare cylindraceo inflexo obtuso.*

*Limodorum luridum. Afzel. in Pers. Synops. 2. 521.*

*Hab. in Sierra Leone, Afzelius, G. Don. (hab. s. sp. et v. v. c.)*

11. *EULOPHIA scripta.*

*E. caulibus carnosis oblongis, foliis lineari-loratis subdistichis, scapis radicalibus ramosis, bracteis pedicellis brevioribus, sepalis petalisque lineari-oblongis obtusiusculis, labelli tripartiti lobis lateralibus apice dilatatis rotundatis: intermedio cuneato rotundato tuberculato bicristato, calcare brevissimo recto obtuso.*

*Limodorum scriptum. Thouars Orch. Afr. tt. 46. 47. Ach. Rich. Orch. Maur. p. 48.*

*Hab. in Madagascaria, Forbes; Borbonia, Thouars. (hab. s. sp.)*

*Flores speciosi, purpureo-lutei. Th.*

12. *EULOPHIA pulchra.*

*E. foliis oblongo-lanceolatis racemis strictis multifloris subæqualibus, sepalis petalisque oblongo-linearibus acutis, labello oblongo basi ventricoso obtuso subundulato (medio calloso?), calcare brevi recto subdidymo.*

*Limodorum pulchrum. Thouars Orch. Afr. t. 43. Ach. Rich. Orch. Maur. p. 49.*

*Hab. in insula Borbonia, Thouars.*

*Flores speciosi, purpureo-maculati.*

13. *EULOPHIA graminea. Lindl. in Wall. Cat. no. 7372.*

*E. foliis gramineis, scapo ramoso, bracteis primordialibus oblongis acutis concavis, floribus erectis in fructu pendulis, sepalis petalisque linearibus acutissimis, labello trilobo basi angustato: lobo intermedio oblongo crispo: venis tribus mediis contiguis subparallelis fimbriato-appendiculatis, calcare brevi clavato.*

*Hab. in Singapur, Wallich. (hab. s. sp. e Mus. Angl. Ind.)*

*Affinis E. virenti, floribus minoribus primâ facie distincta. Vaginæ infimæ scapi ventricosæ.*

14. *EULOPHIA virens. R. Br.*

*E. foliis gramineis lineari-lanceolatis scapo ramoso brevioribus, sepalis pe-*

petalisque oblongis obtusis basi angustatis tessellatis, labelli trilobi barbati lobis lateralibus abbreviatis intermedio ovato obtuso, calcare erectiusculo conico.

*Serapias epidendrum*. *Retz. Obs.* 6. 65.

*Limodorum virens*. *Rosb. Corom.* 1. t. 38. *Swartz. Nov. Act. Ups.* 6. 79. *Willd. Sp. Pl.* 4. 123.

*Limodorum epidendroides*. *Willd. L. c.* p. 124.

Hab. in *India Orientali*; prope *Madras* supra arbores, *Wight*; in *Zeylona* locis umbrosis, *Macrae*. (*hab. s. sp. et v. ic. pict.*)

15. *EULOPHIA carinata*.

*E. foliis linearibus complicatis carnosius fractu facilibus, scapo simplici, labello concavo spatulato apice repando, calcare ecarinato.*

*Katou-Kaïda-Maravara*. *Rheede Hort. Mal.* 12. 51. t. 26.

*Limodorum carinatum*. *Willd. Sp. Pl.* 4. 124.

Hab. in terra, et in arboribus *Malabaræ*; *Rheede*.

Hujus speciei exemplaria nusquam inveni. Folia lata, carinata, fractu *facilia*, 3 pedes alta pollicem lata, nitentia, glabra benè distinguunt.

16. *EULOPHIA macrostachya*.

*E. foliis oblongis utrinque acuminatis plicatis subtricostatis, scapo simplici radicali foliis longiore, sepalis lineari-lanceolatis acuminatis, petalis conformibus latioribus undulatis, labelli suborbicularis trilobi lobis lateralibus intermedio altè bilobo abbreviato subæqualibus: lamellis duabus nanis ad basin, calcare subrotundo inflato obtuso.*

Hab. in *Zeylona* in locis umbrosis sylvarum, *Macrae*. (*hab. s. sp. et v. ic. pict.*)

Scapus 3-pedalis. Sepala et petala viridia apicibus costaque purpureis. Labellum citrinum venis purpureis pictum: lobo medio luteo. Crista antheræ solitaria dorsalis.

17. *EULOPHIA hians*. *Spreng. Syst. Veg.* 3. 720.

*E. foliis (equitantibus?) ensiformibus integerrimis, scapo radicali squamis cucullatis vaginato, sepalis petalisque obtusis, labelli trilobi lobis lateralibus parvis ovatis intermedio ovato-obcordato striato-venoso, calcare tereti arcuato ovarii longitudine.*

*Satyrium hians*. *Linn. Suppl.* 401.

*Limodorum hians*. *Thunb. Fl. Cap.* 76.

Hab. ad *Cap. B. Sp.*, *Thunberg*.

Flores 4-5, cernui, brevissimè pedicellati.

18. *EULOPHIA ensata*. *Lindl. in Bot. Reg.* t. 1147.

*E. foliis lineari-lanceolatis plicatis, scapo simplici, racemo capitato, sepalis petalisque oblongis acutis, labelli trilobi lobis lateralibus abbreviatis obtusis glabris intermedio linguiformi disco barbato, calcare brevi recto conico obtuso, bracteis membranaceis venosis.*

Hab. ut aiunt ad *Cap. B. Sp.*; an potius in *S. Leone*? (*v. v. c.*)

Flores flavi. An eadem ac *E. barbata*?

19. *EULOPHIA atrovirens*.

*E. foliis oblongo-lanceolatis acutis patentibus scapo erecto simplici mul-*

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b b

tifloro subæqualibus, sepalis petalisque ovatis acutis, labello cucullato trilobo : lobis rotundatis intermedio transverso, calcare subinfundibulari obtusissimo.

Hab. in *India Orientali*, Wallich. (v. ic. pict. e Bibl. Angl. Ind.)

Flores ochroleuci sepalis extus purpureo-maculatis. Petalum utrumque hinc serie solitariâ punctorum sanguineorum notatum.

§. 2. *Desciscentes*. Folia equitantia.

20. *EULOPHIA tristis*. Spreng. Syst. Veg. 3. 720.

E. foliis ensiformibus equitantibus serrulatis scapo terminali subramoso brevioribus, bracteis acuminatis ovario longioribus, sepalis petalisque conniventibus oblongis acutis, labelli trilobi lobis lateralibus abbreviatis intermedio oblongo obtuso crispo : venis 7 subparallelis basi lamellosis apice convergentibus fimbriatis, calcare brevi obtuso, antherâ bicristatâ.

Satyrium triste. Linn. Suppl. 402.

Limodorum triste. Thunb. Fl. Cap. 74. Willd. Sp. Pl. 4. 124.

Hab. ad Cap. B. Sp. juxta Zeeko-rivier, et in summo Hottentots-Holland-berg, Thunberg, Ecklon. (hab. s. sp. comm. cel. Lehmann.)

Scapus subcompressus. Flores fusci (s. tristes). Labellum dorso virescentifusum.

21. *EULOPHIA lamellata*.

E. foliis ensiformibus equitantibus integerrimis scapo terminali duplò brevioribus, bracteis acuminatis, sepalis petalisque conniventibus oblongis acutis, labelli trilobi lobis lateralibus abbreviatis intermedio oblongo obtuso crispo : venis omnibus lamellis laceris cristatis.

Hab. ad Cap. B. Spei ; Villet. (hab. s. sp. comm. cel. Hooker.)

E. tristi affinis. Flores majores, folia integerrima, labellum diversissimum.

22. *EULOPHIA micrantha*.

E. foliis ensiformibus equitantibus recurvis margine serrulatis, scapo ramoso terminali basi squamis longis membranaceis vaginato, apicis simplicibus elongatis, perianthio connivente, sepalis angustè ovatis obtusis carnosius subcarinatis, petalis tenuioribus et latioribus, labelli concavi 3-lobi lobis lateralibus divergentibus acutis intermedio rotundato sinubus sinuatis facie 3-lamellato, calcare brevi ventricosus.

Hab. ad Cap. B. Sp. (v. s. sp. in herb. Hooker.)

Tota planta sesqui-2-pedalis. Inflorescentia Dracænâ quandem simulat.

23. *EULOPHIA barbata*. Spreng. Syst. Veg. 3. 720.

E. foliis lineari-ensiformibus recurvis integerrimis, scapo compresso flexuoso foliis duplò longiore, sepalis petalisque ovato-lanceolatis acutis, labelli trilobi lobis lateralibus minoribus intermedio oblongo crispo disco barbato, calcare obtuso.

Serapias capensis. Linn. Mantiss. 293.

Limodorum barbatum. Thunb. Fl. Cap. 75.

Hab. ad Cap. B. Sp. Thunberg. (v. s. sp. in herb. Hooker.)

Flores albidî, Th. Adsunt in herb. Hooker exemplaria duo, quorum alterum scapo flexuoso palmari florido, alterum plusquam sesquipedali gaudet. Folia sunt parva, graminea, recurva ; bracteæ longissimæ membranaceæ ; labelli lobi laterales quasi abscissi ; venæ ferè omnes fimbriatæ, usque ad lobos laterales, sed citra nudæ.

‡ III. *Aphyllæ*. Folia serotina. Flores penduli secundi.

24. *EULOPHIA rupestris*. Lindl. in Wall. Cat. no. 7368.

E. floribus pendulis subsecundis, sepalis petalisque linearibus acutis, labello trilobo basi angustato: lobis lateralibus abbreviatis intermedio oblongo dentato: lamellis 3 contiguis obsoletis integris in axin seriebusq. 5 brevibus denticulorum in laminam lobi medii.

*Limodorum dubium*. Hamilt. Ic. penes D. Bauer.

*Bletia Dabia*. Don. Prodr. Nep. 30.

Hab. in *Napalia*; Wallich, Hamilton. (hab. s. sp. e Mus. Angl. Ind. et v. ic. pict.)

Nomen *Dabia* quasi vernaculum a cel. Donio citatum, nihil est nisi verbum *dubium* malè lectum.

Flores carnei; labellum sanguineo maculatum, cyaneo limbatum.

25. *EULOPHIA campestris*. Wall. Cat. no. 7367.

E. floribus secundis cernuis, sepalis petalisque lineari-spatulatis obtusiusculis, labello oblongo trilobo venoso: lobo intermedio rotundato transverso crenulato lineis tribus brevibus barbatis ad basin, calcare brevi conico incurvo.

Hab. in regno Oude, ad *Bhurtapoor*, Wallich; in dumetis densissimis vallium *Himalayensium*, Royle. (hab. s. sp. e Mus. Angl. Ind.)

Folia ex icone Royliana tria, serotina, lineari-lanceolata, quorum ultimum tantum perfectum. Flores fusco-purpurei, labello albido roseo-marginato. Statura nunc palmaris nunc pedalis, imo sesquipedalis.

26. *EULOPHIA ramentacea*. Lindl. in Wall. Cat. no. 7370.

E. aphylla, bracteis subulatis ovario brevioribus, floribus erectis, sepalis petalisque lineari-spatulatis acutis, labelli trilobi lobo intermedio undulato obtuso, lamellis disci tribus interruptis apice laceris, calcare conico obtuso.

*Dipodium ramentaceum*. Hamilt. Mus.

Hab. in India orientali, ad *Dumdoh*; Hamilton. (hab. s. sp. e Mus. Angl. Ind.)

† Species valdè dubiæ.

27. *Limodorum cristatum*; scapo elongato tereti remotè vaginato, floribus discretis resupinatis, labello basi ventricoso brevi calcarato, laminâ oblongâ recurvatâ medio muricato-cristatâ, lateribus deflexis crispis venosis. Afz. in Pers. Syn. 2. 521.

Hab. in *Sierra Leone*.

28. *Limodorum cucullatum*; scapo elongato remotè vaginato, floribus discretis, labello erecto cuculliformi trilobo medio majore emarginato, calcare brevissimo obtuso. Afz. l. c.

Hab. in *Sierra Leone*.

29. *Bletia stricta*; foliis radicalibus lineari-lanceolatis acutis planis tricos-tatis, scapo stricto vaginato erecto, floribus laxè spicatis, labello trilobo: lobo medio obcordato crenulato, calcare incurvo brevi, sepalis æqualibus. Presl. Reliq. Hænk. p. 98.

Hab. in insula *Luzon*.

30. *Marillaria liliacea* (Llave et Llexars. Orch. p. 12) "radice tuberosâ, foliis ensiformibus plicatis, floribus spathâ verâ tectis."

Hab. in *Mexico* prope *Vallisoletum*, sub umbra arborum, aliquandove supra radices, floretque mensibus æstivis.—Vernaculè *Azuzena del Monte*.—*Iztactepetzacuzochitl*, *Icohuayo*, Hernand. 2. 237. ed. Madr. Llave.

*Planta liliacearum habitu. Folia radicalia, bina aut terna, ensiformia, petiolata, ad basin membranis purpurinis convoluta. Scapus subpedalis, erectus, spathâ membranaceâ, monophyllâ, lateraliter dehiscente ad extremitatem cinctus. Flores nivei thyrsoides. Bracteæ lanceolatæ, demùm, ut tota planta marcida, nigricantes. Perianthium ringens, 3 segmentis superioribus connatis, quorum 2 lateralia lineis purpurinis variegata, duobus inferioribus lunulatis convergentibus eodem modo maculatis. Labellum concolor, ovatum, carinatum, ascendens, limbo integro, ad basin punctis ochreis maculatum, obscure calcaratum. Columna clavata, canaliculata, incurva, versus apicem amplificata. Pollinia 4, reniformia, cereacea. Anthera bilocularis, acuminata. LL.*

If this is rightly described it may be a new genus; but it is not improbable that it may be a *Eulophia* the Pollen-masses of which are inexactly mentioned; or is it not rather another species of *Govenia*?

### CXI. DIPODIUM.

*Dipodium. R. Brown Prodr. 1. 330.*

Perianthium patens, petalis sepalisque æqualibus. Labellum subconforme, utrinque infra medium auriculatum, disco barbatum, basi saccatum et cum columna connatum. Columna erecta, marginata, semiteres. Anthera membranacea, 2-locularis? Pollinia duo, obliquè biloba, caudiculis duabus glandulæ communi affixis.—Herbæ terrestres, aphyllæ. Radix crassa, ramosa. Caules squamosi. Racemi speciosi.

1. *DIPODIUM punctatum. R. Br. Prodr. 331.*

D. squamis radicalibus distantibus, labello recto disco pubescente.

*Dendrobium punctatum. Smith. Exot. Bot. 1. 21. t. 12.*

Hab. in *Nova Hollandia* ad Portum Jackson, necnon in *Insula Van Diemen*, *R. Brown. (hab. s. sp. comm. cel. Brown.)*

2. *DIPODIUM squamatum. R. Br. l. c.*

D. squamis radicalibus oblongis carinatis imbricatis, labello barbato deflexo.

*Ophrys? squamata. Forst. Prodr. 310.*

*Cymb. squamatum. Swartz. Act. Holm. 1800. 238.*

*Dipodium squamatum. Smith. in Rees Suppl.*

Hab. in *Nova Caledonia*, Forster.

### CXII. GALEANDRA.

*Galeandra. Lindl. Illustr. of Orch. Pl. Gen. t. 8.*

Perianthium patens v. connivens, sæpiùs (an semper?) sepalis petalisque ascendentibus, liberis. Labellum infundibuliforme, calcaratum, indivisum, sessile, intùs læve, margine nunc fimbriato. Columna erecta, membranaceo-alata, clinandrio declivi. Anthera galeæformis, cristâ recurvâ cum dorso clinandrii cardinatâ. Pollinia 2, posticè excavata, caudiculâ brevi, cum glandula elongata basi divergenti-biloba articulata.—Herbæ terrestres, foliis plicatis, scapis radicalibus v. racemis terminalibus.

1. *GALEANDRA Baueri*. *Lindl. Illustr. of Orch. Pl. l. c.*

G. foliis oblongis acutis, racemo terminali paucifloro folio superante, sepalis petalisque lineari-oblongis acutiusculis, labello maximo antico repando emarginato apiculato, calcare ovario longiore.

Hab. in *Guiana*, Martin. (v. ic. *Bauer*.)

2. *GALEANDRA gracilis*.

G. foliis lineari-lanceolatis acuminatis scapo vaginato radicali brevioribus, sepalis petalisque explanatis ovatis acutis, labello antico infundibulari obtuso margine fimbriato.

*Eulophia gracilis*. *Lindl. in Bot. Reg. t. 742.*

*Limodorum ciliatum*. *Schumacher. Pl. Guin. 2. 174.*

Hab. in *Sierra Leone*, G. Don, Thonning. (v. v. c.)

Scapus  $1\frac{1}{2}$ -2-pedalis. Flores virides, apicibus sanguineo-maculatis.

3. *GALEANDRA extinctoria*.

G. foliis . . . . , racemo erecto simplici subsecundo paucifloro, sepalis conniventibus(?) obovatis serratis, petalis brevioribus integerrimis obtusis, labello postico extinctoriiformi obtuso margine fimbriato.

Hab. in *Sierra Leone*, G. Don. (hab. s. sp.)

An aphylla?

## CXIII. ZYGOPETALUM:

*Zygopetalum*. *Hooker. in Bot. Mag. t. 2748.*

Perianthium explanatum, sepalis petalisque ascendentibus, subæqualibus, cum ungue producto columnæ connatis. Labellum muticum, indivisum, patens, ungue ascendente: cristâ magnâ transversâ carnosâ. Columna brevis, arcuata, semiteres. Anthera subbilocularis. Pollinia 2, bipartibilia, in glandulam transversam subsessilia. —Herbæ terrestres, subcaules, foliis plicatis patentibus. Flores speciosi, labello cæruleo.

This genus is extremely near *Eulophia*, to which I once reduced it. The subsequent discovery of other species has convinced me that I was wrong, and that it has characters of its own sufficiently pronounced to entitle it to a station by itself.

1. *ZYGOPETALUM Mackaii*. *Hooker l. c.*

Z. foliis lorato-lanceolatis striatis apice recurvis racemo brevioribus, sepalis petalisque oblongo-lanceolatis acutis, labello obcordato pubescente callo baseos crassissimo retrorsum bilobo.

*Eulophia Mackaiana*. *Lindl. in Bot. Reg. t. 1433.*

*Zygopetalum Mackaii*. *Lodd. Bot. Cab. t. 1664.*

β. *crinitum*, venis labelli magis pilosis.

*Zygopetalum crinitum*. *Lodd. Bot. Cab. 1687.*

Hab. in *Brazilia*. (v. v. c.)

Sepala et petala viridia, sanguineo-maculata; labellum albidum maculis purpureis.

2. *ZYGOPETALUM* maxillare. *Lodd. Bot. Cab. t. 1776.*

*Z.* foliis lanceolatis undulatis acuminatis racemo flexuoso longioribus, sepalis petalisque ovato-oblongis acutis, labello obovato callo baseos maximo lunato margine crispo.

Hab. in *Brasilia*, *Loddiges. (v. v. c. comm. amic. Loddiges.)*

Sepala et petala viridia, sanguineo-subvittata; labellum cæruleum, unicolor, callo multò intensiore.

3. *ZYGOPETALUM* rostratum. *Hooker in Bot. Mag. t. 2819.*

*Z.* foliis lato-lanceolatis patentibus scapo sub-unifloro longioribus, sepalis petalisque lineari-lanceolatis undulatis acuminatis, labello subquadrato callo baseos lunato margine crispo, clinandrio alato dentato.

Hab. in *Demerara*, *Parker.*

Sepala et petala fusco-viridia; labellum album venis roseis, callo margine cæruleo-purpureo. Anthera dorso in subulam erectam producta.

CXIV. *CYRTOPODIUM*.

*Cyrtopodium. R. Brown in Hort. Kew. ed. 2. 5. 216.*

Perianthium explanatum, æquale, sepalis petalisque liberis. Labellum unguiculatum, cum basi productâ columnæ continuum, tripartitum, explanatum, ecalcaratum. Columna semiteres. Anthera bilocularis. Pollinia 2, posticè biloba, caudiculâ lineari brevi, glandulâ ovatâ.—Plantæ terrestres, fruticosæ, caulibus fusiformibus carnosis, foliis plicatis, scapis radicalibus vaginatis, floribus speciosis.

N. B. Character vegetationis tantùm ad *C. Andersonii*.

1. *CYRTOPODIUM* Andersonii. *R. Br. in H. Kew. 5. 216. Bot. Mag. t. 1800.*

*C.* sepalis petalisque ovatis undulatis, labelli lobis lateralibus oblongis obtusis intermedio ovato rotundato convexo disco concavo.

*Cymbidium* Andersonii. *Bot. Rep. 651.*

Hab. in *India Occidentali. (v. v. c.)*

Flores flavi. Discus labelli inter lobos laterales callosus.

2. *CYRTOPODIUM* glutiniferum. "*Raddi in Act. Soc. Ital. xix. c. ic. Colla Illustr. et Ic. Hort. Ripul. App. 2. p. c.*"

Hab. in *Brasilia, Raddi.*

I know little of this. It would appear to be distinct from *C. Andersonii*, as *Raddi* must have contrasted it with that species; unfortunately I have not the *Acta Italiana* to consult. A plant in the Garden of the Horticultural Society, sent by the Honble. Mr. Strangways is not distinguishable from *C. Andersonii*.

From all the fleshy stemmed *Orchidæ* a viscid extract is obtained and used for glue in Brazil.

3. *CYRTOPODIUM* punctatum.

*C.* foliis lanceolatis plicatis, scapo paniculato, vaginis maximis laxis membranaceis, sepalis petalisque undulatis acutis maculatis, labelli lobis lateralibus cuneatis intermedio rotundato papilloso.

*Helleborine ramosissima* cauliculis et floribus maculosis. *Phum. Sp. 9. t. 187.*  
*Epidendrum punctatum.* *Linn. Sp. Pl. 1349. Willd. Sp. Pl. 4, 116.*

Hab. in *Hispaniola.* (hab. s. sp. *communic. cel. Mackenzie.*)

Discus labelli inter lobos laterales tuberculatus.

### CXV. CYRTOPERA.

Perianthium explanatum, sepalis petalisque ascendentibus subæqualibus cum ungue longè producto columnæ connatis. Labellum ecalcaratum, concavum, subventricosum, trilobum, venis axens callosis v. cristatis, v. tuberculatis. Columna semiteres, marginata. Anthera 1-2-locularis. Pollinia 2, posticè biloba, caudiculâ brevi subtriangulari.—Herbæ terrestres, foliis plicatis, caulibus carnosis, nunc fusiformibus elongatis, nunc abbreviatis. Flores racemosi, speciosi, scapis radicalibus.

#### 1. CYRTOPERA plantaginea.

C. foliis oblongo-lanceolatis 5-costatis racemo radicali brevioribus, sepalis lineari-lanceolatis, petalis latioribus brevioribus, labelli lobis lateralibus erectis incurvis rotundatis intermedio ovato obtuso undulato: lamellis disci duabus basi tenuibus connatis medio incrassatis apice undulatis, venis tribus brevibus callosis interjectis.

*Limodorum plantagineum.* *Thouars. Orch. Afr. t. 41. 42.*

Hab. in *Madagascaria*, *Thouars, Forbes.* (hab. s. sp.)

Caulis 15-poll. altus. Flores purpurascens. *Th.*

#### 2. CYRTOPERA Woodfordii.

C. caulibus fusiformibus carnosis, foliis lanceolatis plicatis patentibus, scapo radicali multifloro, bracteis subulato-lanceolatis, sepalis lineari-lanceolatis acutis, petalis oblongis conniventibus brevioribus, labelli gibbosi lobis lateralibus rotundatis intermedio emarginato basi bicorni.

*Cyrtopodium Woodfordii.* *Bot. Mag. t. 1814. Lindl. in Bot. Reg. t. 1508.*

Hab. in insula *Trinitatis*; *Martinicd, Richard, Lsert.* (v. v. c. et s. sp. in herb. *Vahl. et Hornem.*)

Flores virides, labello purpureo.

#### 3. CYRTOPERA scabrilinguis.

C. foliis oblongo-lanceolatis basi angustatis, scapo erecto multifloro, bracteis acuminatissimis, sepalis petalisque lineari-oblongis obtusiusculis falcatis, labelli trilobi lobis lateralibus rotundatis intermedio ovato obtuso longiore: totâ facie papillis truncatis densissimis versus callum oblongum medio hypochilii situm decrescentibus obsitâ.

Hab. in *Peruvia*, *Ruiz et Pavon.* (exam s. sp. in herb. *Lambert.*)

Spica faciem habet omnino C. *Woodfordii.*

#### 4. CYRTOPERA flava. *Lindl. in Wall. Cat. no. 7364.*

C. foliis longis lanceolatis plicatis, scapo stricto multifloro, sepalis petalisque ovatis acutis, labelli trilobi lobis lateralibus rotundatis intermedio angustiore obtuso crispo, venis tribus ramentaceis.



Hab. in *India orientali*; in montes *Morang*, *Hamilton*; in convallibus *Himalayensibus* infra *Surkunda*, *Shalma*, et *Mussooree*, *Royle*. (*hab. s. sp. e Mus. Angl. Ind.*)

Scapus tripedalis. Flores lutei, unicolores, speciosissimi.

5. *CYRTOPERA obtusa*.

C. foliis longis lanceolatis plicatis, scapo stricto multifloro, sepalis petalisque obtusissimis, labelli trilobi lobis lateralibus abbreviatis obtusis intermedio oblongo obtuso: axi elevato carnoso basi bituberculato.

Hab. in *India Orientali*; ad ripas fluminis *Tonse* prope *Deokhutul*, *Royle*. (*v. s. sp. in herb. Royle et ic. pict.*)

Præcedenti valdè affinis, floribus minùs numerosis, scapo graciliore, bracteis sepalis petalisque obtusissimis, denique labelli fabricâ abundè diversa.

6. *CYRTOPERA bicarinata*. *Lindl. in Wall. Cat. no. 7363*.

C. aphylla?, scapo gracili distanter vaginato, racemo compacto oblongo, sepalis petalisque lineari-oblongis undulatis acutis, labelli trilobi lobis lateralibus truncatis integris intermedio cuneato undulato bilobo, pede columnæ elongato.

Epipactis? bicarinata. *Hamilt. ic.*

Hab. in *India orientali*, prope *Patgang*, *Hamilton*. (*hab. s. sp. e Mus. Angl. Ind.*)

Flores virentes; labello lilacino striato, medio flavo.

7. *CYRTOPERA plicata*. *Lindl. in Wall. Cat. no. 7362*.

C. foliis acuminatis, scapo laxè vaginato 6-8-floro, sepalis lineari-lanceolatis petalisque latioribus acutis, labelli trilobi basi bicallosi lobis lateralibus rotundatis erectis intermedio subrotundo retuso.

Hab. in *India Orientali*, in montes *Morang*, *Hamilton*. (*hab. s. sp. e Mus. Angl. Ind.*)

Scapus sesquipedalis. Folia juniora tantum vidi.

8. *CYRTOPERA pedicellata*.

C. foliis subsolitariis ensiformibus plicatis, scapo laxè vaginato, floribus racemosis cernuis, sepalis ovato-lanceolatis acutiusculis patenti-erectis lateralibus angulatis, petalis subæqualibus, labelli trilobi lobis oblongis patentibus: intermedio longiore subconcavo supra sulcato ramentis brevissimis obsito.

*Satyrium capense*. *Linn. Sp. Pl. 2*.

*Satyrium pedicellatum*. *Linn. Suppl. 402*.

*Serapias pedicellata*. *Thunb. Prodr. 3*.

*Cymbidium pedicellatum*. *Swartz. in Schrad. Diar. 1799. 224. Thunb. Fl. Cap. 72*.

Hab. ad *C. B. Sp.* prope *Zeeko-rivier* et alibi; *Thunberg*.

Scapus pedalis, et ultrà.

9. *CYRTOPERA? gigantea*.

C. foliis carnosis equitantibus ensiformibus recurvatis scapo erecto brevioribus, racemo multifloro, sepalis petalisque ovatis acutis patentibus, labelli hastati lobis lateralibus deltoideis obtusis utrinque productis intermedio majore oblongo integro convexo: disco longitudinaliter plicato limbo undulato.

*Satyrion giganteum.* *Lin. Suppl.* 402.

*Limodorum giganteum.* *Thunb. Prodr.* 4.

*Cymbidium giganteum.* *Swartz. in Schrad. Diar.* 1799. 224. *Willd. Sp. Pl.* 4. 107.

*Thunb. Fl. Cap.* 73.

Hab. ad *Cap. B. Spei*, juxta Zeekoe-rivier, prope ostium maris; Thunberg.

Epiphyta. Scapus bipedalis et ultrà. Flores flavescentes. Labellum basi subtùs album, supernè purpureo striatum. *Th.*

## CXVI. LISSOCHILUS.

*Lissochilus.* *R. Brown in Lindl. Coll. Bot. t.* 31. (1821).

Perianthium explanatum. Sepala herbacea, parva, reflexa, v. patentia, libera. Petala maxima, patentia, alæformia. Labellum saccatum, concavum, subintegrum, v. trilobum, cum basi columnæ sæpiùs connatum. Columna erecta, brevis, semiteres. Anthera bilocularis, cristata. Pollinia 2, posticè biloba, caudiculà lineari brevi, glandulà triangulari. — Herba terrestris, pseudobulbosa, acaulis. Folia striata v. plicata. Racemi radicales. Flores speciosi.

This genus is scarcely distinguishable from *Eulophia* except by the great disproportion between the sepals and petals.

1. *LISSOCHILUS speciosus.* *R. Br. l. c.*

*L. foliis carinatis, scapo multifloro, sepalis ovatis reflexis subæqualibus, petalis oblongis, labello cum basi columnæ connato basi auriculato: epichilio convexo sulcato emarginato, gibbo brevi convexo acutiusculo.*

*Lissochilus speciosus.* *Bot. Reg. t.* 573.

Hab. ad *Cap. B. Sp., Griffin.* (v. v. c.)

2. *LISSOCHILUS streptopetalus.*

*L. foliis plicatis, scapo radicali multifloro, sepalis oblongis obtusis patentibus, petalis duplò latioribus basi tortis, labelli trilobi lobis lateralibus ascendentibus obtusis intermedio convexo rotundato emarginato 3-costato, gibbo conico abbreviato.*

*Eulophia streptopetala.* *Lindl. in Bot. Reg. t.* 1002. *Graham in Bot. Mag.* 2931.

Hab. in *Brazilia, Hortulani.* An potius *Africana?* (v. v. c.)

Sepala viridia, purpureo seriatim maculata. Petala labellumque vitellina.

3. *LISSOCHILUS parviflorus.*

*L. foliis . . . , scapo 6-8-floro, sepalo supremo ovato concavo unguiculato reflexo lateralibus petalis subæqualibus patentibus, petalis oblongis subunguiculatis, labello sublibero basi auriculato: epichilio oblongo obtuso 3-carinato, gibbo porrecto obtuso anticè sulcato.*

Hab. ad *Cap. B. Sp.* in *Stony Vale, Dr. Gill.* (*exam. s. sp. in herb. Hooker.*)

4. *LISSOCHILUS macranthus.*

*L. bracteis maximis oblongis convolutis cuspidatis, sepalis lineari-oblongis obtusis reflexis æqualibus, petalis latè oblongis obtusissimis, labello sublibero basi infundibulari abruptè acuminato: lobis lateralibus rotundatis intermedio ovato crenato.*

March. 1833.

c c

**Hab.** ad Boney in Africa æquinotiali, *H. Shepherd.* (v. s. sp. in herb. Hooker.)

**Planta** speciosissima. Folia ignota. Petala  $1\frac{1}{2}$  poll. longa. Fabricam labelli hæud benè vidi.

**5. LISSOCHILUS arabicus.**

**L.** foliis oblongo-lanceolatis plicatis, racemo laxo multifloro, sepalis oblongis obtusis patentissimis inferioribus duplò longioribus, petalis oblongis obtusis subunguiculatis, labelli lobis lateralibus acutis: intermedio obovato convexo venis 5 elevatis lamellatis, gibbo conico obtuso anticè carinato.

**Orchis flava.** *Forsk. Cent.* 6. 156.

**Hab.** in Arabia, prope Moschajam Djygàb, *Forskål.* (v. s. sp. in herb. Vahl.)

**Sic** in schedis Forskålîi; forte vox moschaia vult templum, angl. mosque.

**CXVII. NOTYLIA.**

**Notylia.** *Lindl. in Bot. Reg.* 930. (1825.)

**Perianthium** explanatum, æquale; sepalis 2 lateralibus connatis labello suppositis. Labellum liberum ecalcaratum, patentissimum, integrum, medio callosum. Columna erecta, teres, acuminata. Stigma: rima verticalis. Anthera dorsalis, unilocularis, cum stigmate parallela. Clinandrium planum, anticè callosum, posticè marginatum. Pollinia duo integra, caudiculâ elongato-cuneatâ, glandulâ minutâ.——Herbæ epiphytæ. Folia solitaria, striata, stipitata, Pleurothallidis more. Spicæ radicales. Flores inconspicui.

**1. NOTYLIA punctata.** *Lindl. l. c.*

**N.** racemo pendulo, labello obcuneato unguiculato acuto basi calloso, sepalis petalisque obtusis.

**Gomezia tenuiflora.** *Lodd. Bot. Cab.*

**Pleurothallis punctata.** *Ker in Bot. Reg. t.* 759.

**Hab.** in insula Trinitatis; (v. v. c. comm. dom. Bateman.)

**2. NOTYLIA multiflora.** *Lindl. l. c.*

**N.** racemo erecto? labello cordato-ovato acuminato ecalloso longè unguiculato, sepalis petalisque acutissimis.

**Pleurothallis sagittifera.** *Humb. et Kunth. N. G. et Sp. Pl.* 1. 365. t. 91. *Synops.* 1. 347.

**Hab.** supra arbores juxta Turbaco, regione subcalidâ regni Novogranatensis, alt. 180 hexap; Humb. et Bonpl.

**CXVIII. MASDEVALLIA.**

**Masdevallia.** *Fl. Per. Prodr.* 122. t. 27.

**Perianthium** clausum; sepalis acuminatis v. aristatis in tubum campanulatum connatis. Petala nana. Labellum nanum, oblongum, concavum, integrum, cum columnâ articulatum. Columna erecta, linearis, canaliculata. Anthera .... Pollinia duo, caudiculâ brevi.——Herbæ foliis Pleurothallidis, scapis unifloris.

1. *MASDEVALLIA uniflora*. *Fl. Per. Syst.* 238. *Humb. et Kunth. N. G. et Sp.* 1. 361. t. 89.

*M. foliis oblongo-spathulatis, pedunculis unifloris longissimis, sepalis aristatis.*

Rima-Rima *vernacul.*

Hab. in *Huassahuassi* locis saxosis; Ruiz et Pavon; in locis subfrigidis regni *Quitensis*, alt. 1180-1600 hexap. Humb. et Bonpl.

2. *MASDEVALLIA caudata*.

*M. foliis obovato-oblongis scapo paulò brevioribus, sepalis longissimè aristato-caudatis.*

Hab. in subfrigidis regni *Novogranatensis*, prope *S. Fortunato*, florens Junio; *Gudot. (hab. s. sp.)*

3. *MASDEVALLIA infracta*.

*M. foliis obovato-oblongis brevè petiolatis scapi longitudine, floribus ventricosus sub sepalis lateralibus infractis, sepalis longè aristatis.*

Hab. supra arbores in montes Organ, *Brasilæ*; (*v. ic. pict. in herb. Hooker.*)

Flores violacei, basi pallidiores, aristis luteis.

## CXIX. CRYPTOCHILUS.

*Cryptochilus. Wallich Tent. p. 36.*

Perianthium tubulosum, fauce contractum, basi anticè gibbosum. Sepala ferè omninò connata, apice tantùm libera. Petala libera, paulò minora. Labellum indivisum, liberum, cum basi productâ columnæ continuum. Columna semiteres: clinandrio 4-dentato. Anthera 2-locularis. Pollinia 8, paribus 4 glandulæ communi adhærentia.——Terrestris, pseudobulbis aggregatis. Folia semicoriacea, striata, Spica secunda, multiflora.

1. *CRYPTOCHILUS sanguinea. Wall. l. c. t. 26.*

Hab. in *Napalia*, ad cacumen Chandaghiry supra saxa; etiam in montibus Cachar, *Sylhet* confinibus, *Wallich. (hab. s. sp. e Mus. Angl. Ind.)*

Flores sanguinei, pollicares, pubescentes.

## CXX. IONOPSIS.

*Ionopsis. Humb. et Kunth. Nov. Gen. et Sp.* 1. 348.—*Iantha. Hooker Exot. Fl.* 113.

Perianthium clausum. Sepala lateralia basi approximata cum basi labelli connata. Petala sepalis conformia. Labellum sepalis multò majus, basi saccatum, ungue bicalloso columnâ parallelo, laminâ explanatâ patente bilobâ. Columna erecta, aptera, semiteres, rostello rostrato. Anthera 1-locularis rostrata. Pollinia 2, posticè sulcata, caudiculâ lineari inclusâ, glandulâ obovatâ.——Herbæ epiphytæ, acaules. Folia coriacea. Scapi paniculati, vaginati. Flores parvi, pallidi.

1. *IONOPSIS testiculata.*

*I. foliis tereti-subulatis, sepalis acutis anticè didymo-ventricosus, labello ovato-acuminato.*

*Epidendrum Satyrioides.* Swartz. Prodr. 123.

*Dendr. testiculatum.* Swartz. Fl. Ind. Occ. p. 1533.

Hab. in arboribus (Crescentia) montium Hispaniolæ et Jamaicæ rarior; Swartz.

Flores vernales, minuti, odore *Violæ odoratæ* fragrantēs, albi; labello petalisque sanguineo-venosis.

2. *IONORSIS utricularioides.* Lindl. Coll. Bot. t. 39. A.

*I.* foliis lineari-oblongis, sepalis petalisque obtusis anticè non ventricosus, labello obovato emarginato basi bituberculato.

*Epidendrum utricularioides.* Swartz. Prodr. 122.

*Dendr. utricularioides.* Swartz. Nov. Act. Ups. v. 6. 83. Willd. Sp. Pl. v. 4. 133.

*Ianthia pallidiflora.* Hooker Exot. Fl. t. 113.

Hab. in insula *Trinitatis*; Mexico super arbores *Hæmatoxylum*, *Citrum*, &c.; in campis siccissimis *Jamaicæ*, Swartz!; supra arbores *Coffeæ* in *Parahiba*, Merkel. (v. v. c. et s. sp. in herb. Vahl. et Hornem.)

An duæ species hic confusæ?

3. *IONORSIS pulchella.* Humb. et Kunth. N. G. et Sp. Pl. 1. 348. t. 83. Synops. 1. 335.

Hab. locis temperatis subcalidis regni *Novogranatensis* inter Carthaginem et Bugam, ad truncos *Psidii* pomiferi et *Crescentiæ* *Cujete*, alt. 488 hexap. Humb. et Bonpl.

Flores violacei.—Vix aliter differt ab *I. utricularioides*; verosimiliter sunt eædem.

## CXXI. RODRIGUEZIA.

*Rodriguezia.* Flor. Peruv. Prodr. 115. t. 25.—Gomez. R. Brown in Bot. Mag. 1748.

Perianthium patens, subæquale, sepalis 2 lateralibus connatis labello suppositis. Labellum integrum, unguiculatum, basi cornutum, medio callosum; ungue cum columnâ parallelo. Columna teres apice barbata. Anthera unilocularis, carnosa. Clinandrium nudum, retrorsum declive. Pollinia 2, posticè excavata, caudiculâ elasticâ.—Herbæ epiphytæ, subpseudobulbosæ. Folia coriacea, v. membranacea, plicata. Spicæ secundæ. Flores speciosi.

1. *RODRIGUEZIA secunda.* Humb. et Kunth. N. G. et Sp. 1. 367. t. 92.

*R.* pseudobulbis compressis ovalibus, foliis lanceolatis apice emarginatis obliquis, spicâ cylindraceâ foliis longiore recurvâ, sepalo supremo fornicato, petalis ovatis obtusis, labello abruptè deflexo disco calloso apice euneato emarginato.

Hab. in insula *Trinitatis*, Ryan. in herb. Vahl; in locis calidis et subtemperatis Provinciæ *Popayanensis*, prope Carthaginem in truncis *Crescentiæ* *Cujete*, alt. 500 hexap. Humb. et Bonpl. (v. v. c.)

Flores atro-rosei.

2. *RODRIGUEZIA lanceolata.* Fl. Peruv. Prodr. 219.

*R.* "bulbis obovatis, foliis lanceolatis striatis, scapis racemosis dependentibus."

Hab. in *Tarmæ* provinciæ montibus, vulgò *Montañas de los Andes*, ad *Vitoc*, *Palca*, *Collac*, et *Monobamba* vicos; *R.* et *P.*

3. *RODRIGUEZIA ensiformis*. *Fl. Peruv. Prodr.* 218.

R. "bulbis oblongis, foliis ensiformibus lineatis, scapis racemosis erectis."

Hab. in nemoribus *Pozuzo* supra saxa et arbores, versus *Cheniço* et *Tramo* tractus; *Ruiz* et *Pavon*.4. *RODRIGUEZIA recurva*. *Lindl. in Hort. Trans. v. 7. p. 67.*

R. foliis lanceolatis plicatis, racemo recurvo, petalis sepalisque undulatis, labello revoluta emarginato.

*Gomezia recurva*. *Bot. Mag. t. 1748.*Hab. in *Brasilia*, *Douglas*. (v. v. c.)

Flores lutei.

5. *RODRIGUEZIA planifolia*. *Lindl. in Hort. Trans. v. 7. p. 67.*

R. foliis binis planis lineari-lanceolatis utrinque angustatis subaveniis, racemis recurvis.

*Gomezia recurva*. *Bot. Cab. t. 660.*Hab. in *Brazilia*. (v. v. c.)6. *RODRIGUEZIA suaveolens*.

R. pseudobulbis oblongis compressis, foliis oblongo-lanceolatis striatis, scapo erecto multifloro, sepalis petalisque acuminatis, labello ovato reflexo basi longitudinaliter bituberculato membranisque duabus erectis.

*Pleurothallis foliosa*. *Hooker in Bot. Mag. t. 2746.*Hab. in *Brasilia*.Flores odore *Primula veris*, lutescentes, labello luteo.

## CXXII. MACRADENIA.

*Macradenia*. *R. Brown in Bot. Reg. 612. (1822.)*

Perianthium explanatum, liberum, subæquale. Labellum sessile, cucullatum, concavum, indivisum, acuminatum. Columna erecta, labello æqualis, semiteres, clavata, lobis lateralibus apicis in cucullum antheram amplexantem conniventibus; rostello longo subulato. Anthera bilocularis, rostro producto rostellum involvente. Pollinia duo, solida, caudiculâ cuneatâ basi longe angustatâ, glandulâ ovali.——Herba epiphyta, pseudobulbosa. Folia coriacea. Scapi radicales, multiflori.

1. *MACRADENIA lutescens*. *Brown l. c. t. 612*Hab. in insula *Trinitatis*.

Scapus erectus, foliis brevior. Flores luteo-virides, laciniis intus purpureo-fusco marmoratis.

## CXXIII. CRYPTARRHENA.

*Cryptarrhena*. *R. Brown in Bot. Reg. t. 153. (1816.)*

Perianthium explanatum. Sepala libera, petalis obovatis æqualia. Labellum dependens, unguiculatum, ecalcaratum, limbo convexo truncato utrinque bicorni. Columna nana, tumida, aptera. Anthera apice cu-

cullato columnæ inclusa. Pollinia 4.—Herba acaulis. Folia cæspitosa, coriacea. Scapus terminalis, multiflora. Flores parvi lutei.

Char. ex opere et icone citato. An hujus tribûs. Descriptio Brownii valdè manca.

1. *CRYPTARRHENA lunata*. Brown in Bot. Reg. 153.

Hab. in Jamaica.

#### CXXIV. CUITLAUZINA.

Cuitlauzina. *La Llave et Lexarz. Nov. Veg.* 32. (1825.)

Perianthium explanatum, sepalis petalisque subrotundis carnosis, ut plurimum irregularibus. Labellum unguiculatum, flabelliforme; ungue canaliculato, limbo bilobo undulato rugoso. Columna brevis, tumida, apice auriculas tres petaloideas gerens. Anthera petaloidea, unilocularis, cucullata. Pollinia 2, pyriformia, cava, caudiculâ unicâ.—Herba epiphyta, pseudobulbis depressis rugatis. Folia coriacea. Scapus nudus! pendulus, multiflorus, radicalis. Flores speciosi.

Char. ex autor. citat.

1. *CUITLAUZINA pendula*. *Llave l. c.*

Hab. in Mexico, supra arbores juxta Jesus del Monte, prope Vallisoletum, florens Junio et Julio; Llave.

Folia bina, lanceolata, basi equitantia. Flores odoratissimi, albi aut violacei, purpureo-variegati. Labellum concolor discolorve, ungue lutescente punctis coccineis miniato. Anthera alæque candidæ. *Llave.*

#### CXXV. ONCIDIUM.

Oncidium. *Swartz. Act. Holm.* 239. 1800. Brown in Hort. Kew. 3. 215.

Perianthium explanatum. Sepala sæpius undulata: lateralibus nunc sub labello connatis. Petala conformia. Labellum maximum, ecalcaratum, cum columna continuum, variè lobatum, basi tuberculatum v. cristatum. Columna libera, semiteres, apice utrinque alata. Anthera semibilocularis, rostello nunc abbreviato, nunc elongato rostrato. Pollinia 2, posticè sulcata, caudiculâ planâ, glandulâ oblongâ.—Herbæ epiphytæ, nunc pseudobulbosæ. Folia coriacea. Scapi paniculati vaginati, rariùs simplices. Flores speciosi, lutei, sæpiùs maculati, rarè albi.

##### A. *Labellum 3-lobum*. (EUONCIDIUM.)

§ 1. Folia plana, v. complicata.

a. Sepala lateralalia connata.

\* Labelli lacinie lat. nanæ v. obliterate.

\*\* Labelli lacinie lat. intermediæ longitudine æquales.

\*\*\* Labelli lacinie lat. intermediâ majores.

b. Sepala lateralalia libera.

\* Labelli lacinie lat. nanæ v. obliterate.

\*\* Labelli lacinie lat. intermediæ longitudine æquales.

\*\*\* Labelli lacinie lat. intermediâ majores.

§ 2. Folia triquetra, v. teretia.

B. *Labellum integerrimum*. (GENUS?)

A. *Labellum 3-lobum.* (EUONCIDIUM.)§. 1. *Folia plana, v. complicata.*a. *Sepala lateralìa connata.*\* *Labelli lacinie laterales nanæ, v. obliterate.*1. *ONCIDIUM crispum.* Lodd. Bot. Cab. 1854.

*O. pseudobulbis oblongis sulcatis rugosis diphyllis, foliis lanceolatis coriaceis acutis, scapo simplici multifloro, sepalis recurvis undulatis obtusis lateralibus semiconnatis, petalis duplò majoribus oblongis undulatis unguiculatis, labelli lobis lateralibus cornuformibus recurvis nanis intermedio maximo unguiculato subrotundo-cordato undulato, cristâ duplici serie deltoideâ dentatâ, columnæ alis rotundatis denticulatis carnosis.*

Hab. in *Brazilia* in montibus Organ supra arbores mortuos. (v. ic. pict. in herb. Hooker.)

Folia 6-7-poll. basi purpureo maculata. Scapus ascendens simplex, 50-60-florus. Flores aurantiaci luteo limbati, diametro 3-pollicari.

2. *ONCIDIUM nubigenum.* Lindl. in Hooker Bot. Misc. ined.

*O. pseudobulbis 1-2-phyllis, foliis lanceolatis acutis, scapo simplici paucifloro (3-10), sepalis lateralibus rectis semiconnatis petalisque oblongis acutis undulatis, labelli lobis lateralibus nullis intermedio subrotundo subsexlobo, cristâ trituberculatâ compressâ, columnæ alis rotundatis carnosis.*

Hab. in *Andium Peruvianorum* jugo Assuay supra truncos arborum putrescentes, alt. 14,000 ped. rarè infrà, florens Augusto, Jamieson. (exam. s. sp. in herb. Hooker.)

Folia 2½ poll. Scapus spithamæus. Flores magnitudine *O. bifolii* pallidè purpurei.

3. *ONCIDIUM viperinum.* Lindl. l. c.

*O. foliis lineari-lanceolatis acutis planis, scapo simplici cernuo flexuoso racemoso denso multifloro, sepalis lateralibus basi connatis divaricatis petalisque latioribus lanceolatis undulatis recurvis acutis, labelli lobis lateralibus obsoletis denticulatis semisagittatis intermedio subrotundo-reniformi plano subbilobo, cristâ medio tuberculatâ basi et apice bicorni, columnæ alis parvis rotundatis.*

Hab. supra truncos arborum emortuos solo pingui in *Uruguay*. (exam. s. sp. in herb. Hooker.)

This closely resembles *O. bifolium*, differing chiefly in the acute, spreading or recurved petals, in the lower sepals being united only at the base, in the form of the tubercles of the crest, and in the flowers being more closely arranged. The crest when seen in profile resembles strikingly a cluster of young vipers' heads.

4. *ONCIDIUM bifolium.* Sims in Bot. Mag. t. 1491.

*O. pseudobulbis oblongis diphyllis, foliis lanceolatis patentibus planis, scapo simplici cernuo racemoso laxo multifloro, sepalis (quorum lateralìa semiconnata) petalisque obtusis concavis undulatis, labelli lobis lateralibus nanis obtusis recurvis intermedio maximo subunguiculato reniformi plano bilobo repando, cristâ medio interruptè callosâ utrinque tuberculis linearibus patentibus munitâ, columnæ alis rotundatis integris.*

*O. bifolium.* Loddiges Bot. Cab. t. 1845.

Hab. in *Monte-Video*.



Folia 5-6-pollic. 7-8 lin. lata. Scapi 8-pollices longi, imò pedales 6-12-flori. Sepala et petala luteo-olivacea rubro maculata. Labellum luteum immaculatum.

5. *ONCIDIUM pauciflorum*. *Lindl. Coll. Bot. p. 27.*

O. foliis lineari-lanceolatis complicatis acuminatis subfalcatis integris, scapo simplici apice 2-3-floro, sepalo supremo unguiculato lateralibusque connatis cochleatis, petalis majoribus acutis, labelli lobis lat. nanis rotundatis runcinatis: intermedio subsessili reniformi bilobo, cristâ 5-lobâ, columnæ alis acinaciformibus.

*Epidendrum acinaciforme*. *Pavon in Herb. Lamb.*

Hab. in *Mexico*, *Pavon*. (*exam. s. sp. in herb. Lambert.*)

Pseudobulbi nulli. Sepala petalis multò minora, obtusa, inferiùs emarginata. Labellum petalis duplò longius; crista lamellâ unâ bilobâ a tergo, tribusque minoribus quarum intermedia major a fronte. Flores parvi maculati.

6. *ONCIDIUM tetrapetalum*. *Willd. Sp. Pl. 4. 112.*

O. foliis lanceolatis acutis falcatis carinatis complicatis integris, scapo simplici v. paniculato multifloro, sepalis petalisque lanceolatis acuminatis: inferioribus in unum connatis cymbiforme labelli longitudine apice divergenti-bilobum, labelli lobis lateralibus linearibus: intermedio reniformi unguiculato emarginato, cristâ 5-tuberculatâ, alis columnæ acinaciformibus denticulatis.

*Epidendrum tetrapetalum*. *Jacq. Amer. 230. t. 142.*

*Cymb. tetrapetalum*. *Swartz. Nov. Act. Ups. 6. 74.*

O. quadripetalum. *Ib. Act. Holm. 1800, p. 240.*

Hab. in *Jamaica*, *Mac Fadgen*. (*v. s. sp. in herb. Banks.; et exam. in herb. Hooker.*)

Folia radicalia 4-5-poll. Scapus bipedalis. Tota planta quandòque triplò minor.

7. *ONCIDIUM variegatum*. *Swartz. Act. Holm. 1800. p. 240.*

O. foliis oblongis acutis complicatis falcatis margine cartilagineo-serrulatis, scapo multifloro simplici v. paniculato, sepalis obtusis: lateralibus in unum cucullatum integrum connatis, petalis obtusis sublobatis, labelli lobis lateralibus ovatis obtusis recurvis intermedio reniformi undulato bilobo minoribus, cristâ trilamellatâ, columnæ alis acinaciformibus integris.

*Viscum delphinii* flore albo guttato, minus, radice fibrosâ. *Sloan. Jam. p. 251. t. 148. f. 2.*

*Epidendrum variegatum*. *Swartz. Prodr. 122.*

*Cymbidium variegatum*. *Ib. N. Act. Ups. 6. 74.*

O. variegatum. *Willd. Sp. Pl. 4. 113.*

Hab. supra arbores (præsertim *Crescentiam*) in montosis *Hispaniolæ*, *Swartz.* (*hab. s. sp. comm. cel. Mackenzie.*)

Swartz has well observed that this is distinguished from *Oncidium tetrapetalum* by its broader serrulated leaves, and its acuminate not obtuse sepals. For fine specimens gathered in Saint Domingo I am indebted to Charles Mackenzie, Esq.

Like many other species it varies remarkably in stature; the specimens in the Banksian Herbarium from Swartz are not half the size of mine.

8. *ONCIDIUM cornigerum*. Lindl. in Bot. Reg. t. 1542.

O. pseudo-bulbis oblongis sulcatis monophyllis, foliis ovalibus acutis sessilibus striatis scapo simplici decumbente paucifloro brevioribus, sepalo supremo petalisque obovatis concavis undulatis obtusis: inferioribus minoribus angustioribus basi connatis, labelli lobis lateralibus linearibus cornutis intermedio obovato subrepando undulato, cristâ anticè verrucosâ truncatâ posticè lamellâ crenatâ transversâ cornutâ, columnæ alis linearibus obtusis porrectis.

Hab. in *Brasilia*, Herbert.

Folia 2-3 poll. longa, patentissima. Scapus debilis, 5 poll. longus. Anthera membranacea, truncata; clinandrio valdè proclivi.

9. *ONCIDIUM pubes*. Lindl. in Bot. Reg. t. 1007.

O. pseudobulbis subcylindricis 1-phyllis, foliis lanceolatis subcostatis, paniculâ simplici multiflorâ subsecundâ, sepalis obovatis obtusissimis fasciatis: anteriore bidentato, labello pandurato cuneato utrinque bicornuto, cristâ duplici: posteriore depressâ transversim rugosâ anticè bicorni: anteriore cordatâ, (anticè obsoletè 3-dentatâ dente medio submembranaceo fornicato: lobo lineari canaliculato utrinque è regione cristæ anterioris dependente), columnæ alis linearibus truncatis, stigmatè rostelloque pubescentibus.

O. bicornutum. Hooker in Bot. Mag. t. 3109.

Hab. in *Brasilia*, prope Rio Janeiro, Douglas. (v. v. c.)

Sepala et petala virentia, rubro-fasciata. Labellum pallidum, sanguineo marginatum.

10. *ONCIDIUM flexuosum*. Sims in Bot. Mag. t. 2203.

O. pseudobulbis ovalibus compressis 2-phyllis, foliis oblongo-lanceolatis, striatis, paniculâ ramosissimâ multiflorâ: ramis ascendentibus, sepalis oblongis obtusis, petalis obovatis undulatis, labelli laciniâ mediâ transversâ rotundatâ subquadrilobâ basi truncatâ lateralibus auriculæformibus, cristâ posticè pulvinatâ anticè in lobos 3 laceros divisâ utrinque tuberculatâ, columnæ alis rotundatis.

Hab. in *Brasilia*. (hab. s. cult. comm. illustr. Cometiss. Amherst.)

Flores lutei, nitidissimi.

\* \* Labelli laciniæ laterales intermediæ longitudine æquales.

11. *ONCIDIUM fimbriatum*.

O. pseudobulbis . . . . ., foliis . . . . ., scapo . . . . ., sepalo supremo obovato fornicato inferiore 2-partito acuminato labello subæquali, petalis obovatis undulatis sinuatis, labelli laciniâ intermediâ subrotundâ apiculatâ lateralibus linearibus ascendentibus, cristâ tuberculis fimbriatâ posticè cuneatâ truncatâ anticè divergentibilobâ, columnæ alis ovatis apice corrugatis, clinandrio fimbriato.

Hab. in *Brasilia*, Hort. Reg. Kew. (v. ic. Bauer.)

Flores lutei; sepala et petala sanguineo maculata; labellum unicolor. Crista posticè ochracea, anticè sanguinea.

March 1833.

v d

\* \* Labelli laciniae laterales intermediae aequales.

12. *ONCIDIUM ciliatum*.

*O. pseudobulbis ovatis compressis monophyllis, foliis complicatis lineari-oblongis obtusis scapo erecto flexuoso apice paucifloro pluries brevioribus, sepalis undulatis lineari-oblongis obtusis: anteriore bilobo, petalis obovatis crispis, labello aequaliter tripartito sepalis brevioribus: lacinii obovatis sinibus suis latissimis fimbriatis, cristâ 5-corni cornubus posticis divergentibus anticis collateralibus tuberculis quibusdam interjectis, columnæ alis ovatis acutis.*

Hab. in *Brasilia, Hort. Reg. Kew. (v. ic. Bauer.)*

Folia 2-3 poll. longa. Scapus debilis, subpedalis, sanguineo punctatus. Flores lutei, sanguineo maculati. Labelli laciniae unicolores.

\*\*\* Labelli laciniae laterales intermedia majores.

13. *ONCIDIUM barbatum. Lindl. Coll. Bot. t. 27.*

*O. pseudobulbis oblongis compressis monophyllis, foliis lineari-oblongis coriaceis obtusis emarginatis, scapo flexuoso paniculato, sepalis lanceolatis undulatis acutis: duobus inferioribus basi connatis divergentibus, petalis conformibus obtusis, labello transverso sepalis brevioribus: lobis lateralibus obovatis intermedio minimo bilobo; disco barbato, cristâ depressâ trilobâ lobo medio tricrenato, alis columnæ brevibus rotundatis.*

Hab. in *Brazilia, Swainson. (v. v. c.)*

Sepala et petala fusca punctata. Labellum flavum disco sanguineo-maculato. Columna lutea fuscopurpureo variegata. Scapus gracilis 2-pedalis.

b. *Sepala lateralia libera.*

\* Labelli laciniae laterales nanæ, v. oblitteratæ.

14. *ONCIDIUM altissimum. Swartz. Act. Holm. 1800, p. 240.*

*O. pseudobulbis oblongis compressis, foliis ensiformibus rigidis carinatis carnosius scapo (6-pedali) erecto ramoso multò brevioribus, sepalis petalisque labelli longitudine lineari-lanceolatis undulatis, labello cordato utrinque introrsum arcuato apice dilatato subreniformi emarginato, cristâ enneadactylâ, columnæ alis abbreviatis.*

α. Alis columnæ rotundatis.

*Epidendrum altissimum. Jacq. Amer. 229, t. 141.*

*O. altissimum. Swartz. Fl. Ind. Occ. 1481. Willd. Sp. Pl. 4, 112. Hooker in Bot. Mag. 2990.*

β. Alis columnæ truncatis.

*O. Baueri. Illustr. of Gen. & Sp. of Orchideous Plants, t. 7. Genera.*

*Epidendrum Gigas. Richard in Herb. Vahl.*

Hab. in *Panama et Columbia occidentali, Cuming, No. 1247; in Jamaica alibique in India occidentali in truncos arborum, Swartz; ad Porto Rico, West in herb. Vahl; Cayenna, Richard. (hab. s. sp. et v. v. c.)*

Flores flavescentes fusco marginati et guttati. Labellum luteum fasciâ latâ lateritiâ. Huc procul dubio *Epid. Gigas Richard in herb. Vahl.* cui "Bulbi bifolii oblongi compressi pollicares, scapus radicalis 9-pedalis, et folia ensiformia 9-pedalia" tribuuntur.

Obs. Crista labelli in icone Hookeriana polydactyla, et flores vix maculati; an rectè?

15. *ONCIDIUM pictum*. *Humb. et Kunth. N. G. et. Sp. Pl.* 1, 346. t. 81.

*O. pseudobulbo ovato-oblongo, foliis latè linearibus coriaceis, scapo paniculato multifloro, sepalis lineari-lanceolatis unguiculatis petalisque obtusis undulatis, labelli lobis lateralibus rotundatis nanis intermedio transverso retuso undulato, cristà 7-8-tuberculatà, columnæ alis subulatis ascendentibus.*

Hab. in temperatis Provinciæ *Papayanensis* inter villam el Naranjo et pagum Roldanilla alt. 540 hexap. florens Octobri, Humb. et Bonpl.

This differs from *O. altissimum* in its leaves being narrower, its scape much shorter, the wings of the column subulate, and the spots of the flower red, not brown. *Kunth.*

16. *ONCIDIUM funereum*. *Llave et Lexars. st. nov.* 2, 37.

*O. foliis ensiformibus acutis, scapo stricto paniculato multifloro, sepalis petalisque lanceolatis undulatis: inferioribus subfalcatis longioribus, labelli lobis lateralibus rotundatis integerrimis nanis: intermedio subrotundo sessili apice et utrinque versus basin emarginato, cristà tuberculatà, columnæ clavatæ alis abbreviatis integerrimis semisagittatis.*

Hab. in *Mexico, Pávon*; præcipuè juxta Irapæum et Jesus del Monte, florens Novembri, Llave. (*exam. s. sp. in Herb. Lambert.*)

Michuacanenses accolæ veluti ornamenta sepulchralia flores hujus adhibent. Pseudobulbi lenticulares, subrotundi, depressi, diphylli. *Llave.* Scapus longissimus. Flores magnitudine *O. Carthaginensis*.

17. *ONCIDIUM Carthaginense*. *Swartz. Act. Holm.* 1800, p. 240.

*O. foliis oblongis acutis rigidis carnosis, scapo paniculato multifloro, sepalis undulatis: supremo unguiculato obtuso cochleato reflexo lateralibus lanceolatis acutis patentibus, petalis obtusis undulatis lobatis, labelli lobis lateralibus acutis recurvis intermedio subrotundo-reniformi emarginato majore, cristà trilobà carnosà lobis tuberculatis intermedio acuto elongato, columnæ alis carnosis obliquis rotundatis repandis.*

*Epidendrum Carthaginense. Jacq. Amer.* 228, t. 133. f. 4.

*O. Carthaginense. Willd. Sp. Pl.* 4, 112.

*Epidendrum undulatum. Bot. Mag. t.* 777 *malæ.*

Hab. in *Carthagenæ* sylvis densis, Jacquin. (*v. v. c.*)

Flores olivacei, maculati, labello basi luteo sanguineoque variegato. Glandula polliniorum maxima, posticè membranaceo-biaurita; caudiculà nullà. Crista labelli omninò ranam refert.

18. *ONCIDIUM luridum*. *Lindl. in Bot. Reg.* 727.

*O. foliis oblongis acutis rigidis carnosis, scapo paniculato multifloro, sepalis petalisque undulatis obovatis; superioribus obtusis, inferioribus acutis, labelli lobis lateralibus nanis obtusis intermedio undulato transverso emarginato, cristà tuberculis 2 ad basin 2 majoribus intermediis callisque tribus cruciatis à fronte, columnæ alis unguiculatis rotundatis brevibus.*

? *Epidendrum guttatum. Linn. Sp. Pl.* 1351.

? *Cymbidium guttatum. Willd. Sp. Pl.* 4, 102.

? *Oncidium cuneatum. Lindl. Coll. Bot. p.* 27.

Hab. in *Jamaica, Waters*; etiam in insula *Trinitatis*. (*v. v. c. et s. sp. in herb. Hooker.*)

This although very nearly related to *O. Carthaginense*, is undoubtedly distinct. Its petals and upper sepal are very obtuse and nearly alike in

form, the former are not lobed, the side lobes of the labellum are much smaller, and the tubercles of the crest are quite different. The gland of this, although very like that of *O. Carthaginense*, has the membranous auricles larger. I presume the very obscure *Cymbid. guttatum* must be this plant.

19. *ONCIDIUM olivaceum*. *Humb. et Kunth. N. G. et Sp.* 1. 347.

*O.* "bulbo ovato-oblongo, foliis oblongo-lanceolatis, pedunculo simplici multifloro, foliolis calycis carnosis reflexis, labello trifido: lacinia intermedia subreniformi emarginata, gynostemio basi alis rotundatis instructo apice cucullato."

Hab. in crepidinibus montis ignivomi *Puracé*, prope urbem Popayan, alt. 1754 hex. florens Octobri. *Humb. et Bonpl.*

Folia 3-4-pollicaria Scapus 1-2-pedalis. Sepala lanceolata, acuminata, 9-10 lin. longa. Petala oblonga, acuta, sepalis breviora. Labellum maximum; lacinia intermedia crenulata, plana, rosea, poll. lata,  $\frac{1}{2}$ -p. longa, basi angustata, tuberculo conico flavo cristata; lateralibus oblique ovatis, undulatis, distantibus, rubro-maculatis, 4-5 lin. longis. *Ex Kunth.*

20. *ONCIDIUM ampliatus*. *Lindl. in Bot. Miscell. n. s. ined.*

*O.* sepalis omnibus liberis, labello bilobo subrotundo transverso: lobis lateralibus brevissimis, callo baseos 3-lobo: lobis lateralibus teretibus intermedio compresso, alis columnæ 3 cuneatis dentatis lateralibus reflexis, pseudobulbis subrotundis compressis, foliis planis oblongo-lanceolatis, scapo erecto apice ramoso.

Hab. in *Panama*, et *Columbia occidentali*, *Cuming*; no. 1312. (*hab. s. sp.*)

21. *ONCIDIUM Harrisonianum*. *Lindl. in Bot. Reg.* 1569.

*O.* pseudobulbis subglobosis monophyllis, foliis carnosis lineari-oblongis acutis recurvis, panicula ramosa multiflora, sepalis petalisque linearibus obtusissimis, labelli laciniiis lateralibus minutis auriculæformibus intermedia unguiculata transversa emarginata, cristâ 5-lobâ centro pubescente, columnæ alis deltoideis rectiusculis.

Hab. in *Brasilia*, in montibus Organ, *Gul. Harrison.* (v. v. c.)

22. *ONCIDIUM globuliferum*. *Humb. et Kunth. N. G. et Sp.* 1. 347.

*O.* "bulbo subgloboso, foliis oblongis brevissimè mucronatis, scapis simplicibus subunifloris, foliolis calycis subæqualibus crenulato-undulatis, labello subreniformi apice emarginato-bilobo, gynostemio apice alâ crenulata cincto?"

Hab. supra arborès in declivitate Andium *Popayanensium* in convalli fluvii Putes et juxta pagum Timbio, alt. 730 hex. florens Octobri. *Humb. et Bonpl.*

Folia sesquipoll. 7-8 lin. lata. Scapi sesquipoll. Bracteæ plures, imbricatæ, acuminatæ. Flores rubro-maculati. Sepala et petala obtusa. Labellum maximum, basin versus angustatum, laciniiis lateralibus minimis rotundatis. *Ex Kunth.*

23. *ONCIDIUM iridifolium*. *Humb. et Kunth. N. Gen. et Sp. Pl.* 1. 344.

*O.* foliis ensiformibus brevibus equitantibus, scapo simplici subunifloro, sepalo supremo obtuso: lateralibus acutis collateralibus, petalis obtusis undulatis majoribus, labelli lobis lateralibus parvis subrotundis ungui-

culatis: intermedio multò majore subrotundo bilobo utrinque versus apicem emarginato, cristà . . . , columnæ alà crenulatà circumdante.

*Epidendrum pusillum.* Linn. *Sp. Pl.* 1352.

*Cymbidium pusillum.* Swartz. *Nov. Act. Ups.* 6. 74. Willd. *Sp. Pl.* 4. 104.

Hab. in *America æquinoctiali*; Mexico, Pavon; Surinam, Dahlberg; Nov. Grenada, Humb. et Bonpl. (v. v. sp. in *Herb. Lambert.*)

Flores flavi, sub-maculati. Statura 2-3-pollicaris.

24. *ONCIDIUM Papilio.* Lindl. in *Bot. Reg.* t. 910.

O. pseudobulbis subrotundis compressis rugosis monophyllis, foliis oblongis coriaceis obtusis maculatis, scapo perennante debili ancipiti articulato apice paucifloro, sepalo supremo petalisque linearibus longissimis basi angustatis, sepalis lateralibus oblongis revolutis undulatis labello longioribus, labelli lacinia intermedià emarginatà subrotundà crispà basi valdè angustatà lateralibus rotundatis, cristæ glandulis formam ranæ cubantis referentibus, columnæ alis serratis.

O. *Papilio.* Hooker in *Bot. Mag.* 2795. Loddiges *Bot. Cab.* t. 1086.

Hab. in insula *Trinitatis.* (v. v. c.)

25. *ONCIDIUM tigrinum.* Llave *Orch. Mex.* 2. 36.

O. "bulbis ovatis ancipitibus; foliis lanceolatis bulbo innatis; scapo terti simplici; floribus laminà labelli reniformi longè unguiculatà."

Flor de Muertos vernaculè.

Hab. in Mexici montibus Irapæi prope *Vallisoletum*, florens Novembri; Llave.

Pseudobulbi 3-poll. et ultra, 2-3-phylli. Scapus teres, 2-pedalis, 3-5-florus. Flores odore violæ suavissimo, magni, speciosi, pellem tigrinam referentes. Sepala et petala lanceolato-ovata, lutescentia, maculis tigrinis castaneo-purpureis totà superficie variegata. Labellum maximum, luteum, immaculatum, laminà amplissimà, carnosà, reniformi aut bilobatà, undulatà. Columnæ alæ acuminatæ.

Variat 1°. scapo ramoso giganteo multifloro, et 2°. scapo attenuato elato, floribus gracillimis prope Paracho. Llave.

\* \* Labelli lacinie laterales intermediæ longitudine æquales,

26. *ONCIDIUM onustum.* Lindl. in *Bot. Miscell.* n. s. ined.

O. sepalis omnibus liberis, labello bilobo transverso: lobis lateralibus linearibus apice subdilatis, callo baseos oblongo cochleato anticè appendiculà tuberculiformi instructo, alis columnæ 2 integerrimis, foliis linearibus complicatis falcatis, scapo simplici, racemis cernuis secundis multifloris,

Hab. in Panama et Columbia occidentali; Cuming, no. 1208. (hab. s. sp.)

27. *ONCIDIUM panduriferum.* Humb. et Kunth. *N. G. et Sp.* 1. 346. t. 82.

O. "foliis lanceolatis, pedunculo paniculato multifloro, calycis foliolis subæqualibus undulatis unguiculatis, labello panduriformi apice emarginato, gynostemio apice alà quinquelobà cincto."

Hab. in convallibus Regni *Novogranatensis*, sub cœlo mitiori, ad radices Parami Pitatumbæ; juxta pagum Pongo, inter urbes Almaguer et Pasto, alt. 1370 hex. florens Novembri. Humb. et Bonpl.

Folia 7-8-poll. longa, sesquipoll. vix lata. Scapus sub 4-pedalis. Flores exsiccati aurantiaci. Sepala et petala subrotundo-ovata obtusa. Labellum laciniiis lateralibus intermediæ subtruncatæ subæqualibus, sinubus interjectis valdè apertis; tuberculis 4 cristatum. Columna cucullata margine petaloideo utrinque bilobo, inde, cucullo numerato, "ala 5-loba cincta." *Ex Kunth.*

28. *ONCIDIUM echinatum.* *Humb. et Kunth. N. G. et Sp. 1. 345. t. 79.*

O. "bulbo oblongo; foliis oblongo-lanceolatis, pedunculo paniculato multifloro; labello trifido basi bialato, gynostemio alato rostrato, rostro elongato adscendente; capsulâ glandulosâ echinatâ.

Hab. ad litora *Mexicana*, occidenti soli opposita, prope Acapulco, regione ferventissimâ, florens Aprili. *Humb. et Bonpl.*

Pseudobulbus oblongus, subpollicaris. Folia sesqui-aut bipollicaria. Scapus pedalis. Sepala et petala lanceolata, acuminata, patentia, subæqualia. Labelli lacinia laterales rotundatæ, intermediæ ovatæ obtusæ unguiculatæ ferè æquales. Alæ duæ, lineares, ad basin lacinia internè labelli. Columna brevissima, longissimè rostrata, alis lineari-lanceolatis divaricatis. *Ex Kunth.*

29. *ONCIDIUM ornithorhynchum.* *Humb. et Kunth. N. G. et Sp. 1. 345. t. 80.*

O. "bulbo oblongo, foliis lanceolatis, pedunculo paniculato multifloro, labello subpanduriformi apice emarginato, gynostemio alis duabus cuneatis erectis coronato longè rostrato: rostro recto."

Hab. in temperatis regni *Mexicani* prope el Puerto de Andaracuas, inter urbes Guanaxuato et Valladolid de Mechoacan, alt. 1010 hex. florens Septembri. *Humb. et Bonpl.*

Pseudobulbus oblongus, glaber, sesquipollicaris. Folia lanceolata, acuta, striato-nervosa, vix coriacea, 4-5-poll. longa, 7-lin. lata. Sepala subæqualia, spatulata, apice rotundata. Petala oblonga, obtusa. Labellum angustum, lacinia mediâ contractâ, et idèd lac. laterales, quæ alioqui nanæ essent, ei ferè æquales. Crista, ex icone, 5-loba. Alæ columnæ denticulatæ. *Ex Kunth.*

30 ? *ONCIDIUM hyalinobulbum.* *Llave Orch. Mex. 2. 38.*

O. "bulbis lenticularibus subhyalinis; foliis lineari-lanceolatis; scapo filiformi flexuoso; floribus insectiformibus resupinatis; laminâ labelli lanceolatâ; gynostemio cuneiformi longè rostrato."

Hab. in *Mexico*, supra arbores ad Acuitzium, florens vere. *Llave.*

Planta exigua. Pseudobulbi punctati, diphylli. Scapus pauciflorus. Sepala et petala lanceolata subæqualia. Labellum carnosum, 3-partitum, basi tribus auriculis tuberculosiis prominentibus: lobulis lateralibus cuneatis subrotundis, intermedio ovato acuminato pendulo. *Llave.*

Vix hujus generis.

31. *ONCIDIUM serpens.* *Lindl. in Bot. Misc. ined.*

O. caule repente tortuoso filiformi ad nodos radicante pseudobulbifero, foliis oblongo-lanceolatis acutis pedunculis bifloris brevioribus, sepalis petalisque obovatis obtusis planis æqualibus, labello oblongo obtuso medio constricto basi bilamellato, columnâ marginatâ apice membranaceâ cucullatâ.

Hab. supra arbores ad Patacocha in via Esmeraldas ducente, alt. 1000 hexap. *Hall. (v. s. sp. in herb. Hooker.)*

Caulis pennâ corvinâ minor. Folia 2-poll. longa,  $\frac{1}{2}$ -p. lata, inferiora extra pseudobulbos minora, vaginis latis striatis. Flores lutei, castaneo maculati, ferè pollicem lati, facie Macradeniæ luteæ. Clinandrium cucullatum: membranâ in margines columnæ decurrente. Alæ obsoletæ. Anthera et pollinia ignota.

\* \* \* Labelli lacinie laterales intermediâ majores.

32. *ONCIDIUM macranthum.*

O. sepalis cordatis oblongis obtusis undulatis unguiculatis, petalis æqualibus conformibus paulò latioribus et brevibus unguiculatis, labelli hastati laciniiis lateralibus subfalcatis intermediâ acuminatissimâ majoribus, cristâ basi hastatâ apice dentibus duabus runcinatis, columnæ alis rotundatis.

Hab. in *Guayaquil, Ruiz et Pavon. (exam. florem unicum s. in herb. Lambert.)*

Adest præterea folium oblongo-lanceolatum 2-costatum, pedale; sed necio an flori verè pertineat. Floris diametrum 3-pollicare.

33. *ONCIDIUM divaricatum. Lindl. in Bot. Reg. t. 1050.*

O. foliis oblongis obtusis apiculatis concavis coriaceis margine sæpè fissis, scapo paniculato divaricatissimo, sepalis petalisque obovatis obtusis æqualibus, labelli crenulati cordati lobis lateralibus rotundatis intermedio sub-cordato rotundato emarginato majoribus, cristâ pulvinatâ pubescente 4-lobâ, columnæ alis rotundatis integerrimis.

β. *cupreum*; perianthii foliolis angustioribus cupreis vix maculatis.

Hab. in *Brasilia*; ad Corcovado prope Rio de Janeiro, *Herb. Hooker. (v. v. c. et s. sp. in Herb. Hooker.)*

Pseudobulbi subrotundi, compressi, monophylli. Scapus 3-4-pedalis. Flores viridi-lutei, rubro maculati.

34. *ONCIDIUM pumilum. Lindl. in Bot. Reg. t. 920. Bot. Cab. 1732.*

O. pseudobulbis nullis, foliis rigidis ovalibus obliquis, paniculâ erectâ thyrsoidæ foliorum longitudine, sepalis petalisque obovatis incurvis, labello subrotundo trilobo: lobis ovatis obtusis: intermedio paulò minore: disco callis duobus longitudinalibus sinibus loborum oppositis cristato, alis columnæ integerrimis.

β. alia columnæ cuneiformibus truncatis, cristâ labelli obsoletâ, foliis atroviridibus vix maculatis, staturâ majore.

Hab. in *Brasilia*; *Harrison, Douglas. (v. v. c.)*

§. 2. Folia triquetra, v. teretia.

35. *ONCIDIUM triquetrum. R. Brown in Hort. Kew. ed. 2. 5. 216.*

O. "petalis acutis: anticis connatis, labelli lobo medio subrotundo indiviso, scapo racemoso, foliis triquetris." *R. Br.*

*Epidendrum triquetrum. Swartz. Prodr. 122.*

*Cymbidium triquetrum. Swartz. Nov. Act. Ups. 6. 74. Willd. Sp. Pl. 4. 104.*

Hab. in *Jamaica, Swartz. (v. s. sp. in herb. Banks.)*

Folia triquetra, cultrata, apice compressa, lanceolata, acuta. *Sw.*—Sca-



pus simplex, 5-florus. Sepalum supremum erectum, lanceolatum, unguiculatum, acuminatum. Petala majora, ovata, acuta, medio colorata. Labellum sæpe posticum, ovato-cordatum, ecristatum!, utrinque emarginatum, apiculatum. Columnæ alæ obliquæ, rotundatæ, planæ.

36. *ONCIDIUM pulchellum*. *Hooker in Bot. Mag. t. 2773.*

O. foliis acutè triquetris carinatis subfalcatis integris, scapo simplici apice racemum subsimplicem cernuum gerente, sepalis cymbiformibus acuminatis lateralibus connatis, petalis obovatis rotundatis planis, labelli lobis lateralibus rotundatis intermedio subrotundo sessili retuso subæqualibus, cristâ trilobâ anticè 1-callosâ, alis columnæ acinaciformibus denticulatis.

Hab. in *Jamaica*, *Mac Fadgen*; *Demerara*, *Parker*. (hab. s. sp. comm. cel. *Hooker*.)

This very remarkable species has the habit of *O. variegatum*, and *tetrapetalum*, from both which it is readily distinguished by the large lateral lobes of its labellum, and the cymbiform upper sepal. Its crest is also essentially different, consisting of three narrow nearly equal collateral elevati calli, in front of which is placed a short tubercle.

Its flowers are pure white with a little orange about the crest of the lip. The column is pink.

37. *ONCIDIUM Cebolleta*. *Swartz. Act. Holm. 1800. p. 240.*

O. foliis radicalibus teretibus subulatis, scapo stricto paucifloro, sepalis petalisque lanceolatis unguiculatis, labelli laciniis lateralibus abbreviatis erectis intermediâ unguiculatâ reniformi emarginatâ, columnæ alis retrorsum falcatis rotundatis integris.

*Helleborine maculosa*, foliis junceis et sulcatis. *Plum. Sp. 9. ic. 184. f. 2.*

*Epidendrum Cebolleta*. *Jacq. Amer. 230. t. 131. f. 2.*

*Oncidium Cebolleta*. *Willd. Sp. Pl. 4. 113.*

*Epidendrum juncifolium*. *Linn. Sp. Pl. 1351.*

*Cymbidium juncifolium*. *Willd. Sp. Pl. 4. 102.*

*Oncidium juncifolium*. *Lindl. Coll. Bot. p. 27.*

Hab. in *India occidentali*, insula *Sæ. Lucie*, *Herb. Banks*; *Carthagenæ* sylvis, *Jacquin*. (v. s. sp. in herb. *Banks*.)

*Pseudobulbi* nulli. Folia 9-12 uncias longa, subulata, teretia, basi membranaceo-vaginata. Scapus erectus, pauciflorus, angulatus, glaber. Perianthii lacinie subæquales, patentes, tessellatæ, lanceolatæ, acutæ, undulatæ. Labellum 3-lobum: lobis lateralibus brevibus, oblongis, obtusis, erectis; medio unguiculato, maximo, plano, subrotundo-reniformi, emarginato; cristâ .... Alæ columnæ magnæ, retrorsum falcatæ, rotundatæ, integræ.

B. *Labellum integerrimum*.

38. ? *ONCIDIUM emarginatum*. *Meyer Fl. Esseq. 259.*

O. "foliis lanceolato-linearibus obtusis emarginatis, floribus terminalibus, labello obovato integerrimo, gynostemii alis ovato-subrotundis." *Meyer*.

Hab. in *Essequibo*, *Meyer*.

Caules spithamsei, sulcati. Folia 2-2½-poll. longa, integerrima. Flores parvi, purpurei, punctis argenteis notati. Per. foliola 3 ext. oblongo-lanceolata, acuminata, inferiora 2 paululum breviora, oblonga, acuta.

Labellum obovatum, basi attenuatum, integerrimum, planum, supra tuberculis rugæformibus notatum. Gynostemium breve, apice alis 2, parvis, patenti-erectis, rotundatis instructum. *Meyer l. c.*

### CXXVI. FERNANDEZIA.

*Fernandezia. Fl. Peruv. Syst. 239. Lockhartia. Hooker. Bot. Mag. 2715.*

Perianthium patens. Sepala libera. Petala conformia, sub sepalo supremo conniventia. Labellum anticum v. posticum, ecalcaratum, liberum, trilobum, disco tuberculatum. Columna brevis, utrinque aurita. Anthera bilocularis. Pollinia 2, solida, obovata, glandulâ ..... caudiculâ .....—Epiphytæ caulescentes. Folia disticha, equitantia, imbricata. Racemi pauciflori, terminales v. laterales. Flores parvi lutei.

This genus, as understood by the authors of the Flora Peruviana, certainly comprehended species not only of *Pachyphyllum* and *Dichæa*, but also of *Isochilus*. Several of the species here introduced from the *Systema Floræ Peruvianæ*, are therefore doubtful, and are most likely repeated elsewhere; for this reason I have not numbered them.

1. *FERNANDEZIA elegans. Lodd. Bot. Cab. t. 1214.*

F. foliis obtusis ovatis carinatis, floribus paniculatis, bracteis obtusis membranaceis, labelli hastati lobis lateralibus acutis intermedio oblongo obtuso, disci tuberculis anticis minimis aggregatis: posticis maximis coloratis.

*Lockhartia elegans. Hooker. in Bot. Mag. t. 2715.*

Hab. in insula *Trinitatis*, *Ryan* in herb. *Vahl. (v. s. sp. sine floribus.)*

2. *FERNANDEZIA denticulata. Fl. Per. Prodr. p. 240.*

F. "foliis oblongis acuminatis carinatis denticulatis, caule nutante, pedunculis 3-5-floris."

Hab. in *Pillao* supra arbores et saxa. *R. et P.*

3. *FERNANDEZIA subbiflora. Fl. Per. Prodr. 240.*

F. "foliis ensiformibus carinatis, caulibus virgatis, pedunculis subbifloris."

Hab. in *Muña* supra arbores et saxa. *R. et P.*

*Species omnino dubiæ; in Systemate Vegetabilium Floræ Peruvianæ admissæ, sed verosimiliter sub Pachyphylo, Dichæa, aliisque iteratæ.*

FERN. punctata.

F. "foliis linearibus inæqualiter emarginatis, ramis dichotomis, floribus axillaribus, nectarii labio prominentiâ notato." p. 239.—In *Muña*, supra arbores et saxa.

FERN. laxa.

F. "foliis lanceolatis acuminatis contortis, caule laxo, nectarii labio utrinque denticulo recurvo." p. 240.—Cum præcedente.

FERN. hæmatodes.

F. "foliis ovato-lanceolatis margine scabris, caulibus erectis, floribus ternis, petalis interioribus brevioribus." p. 241. —Cum præcedente.

April, 1833.

E C

**FERN. graminifolia.**

F. "foliis linearibus emarginatis, caule radicante, ramis furcatis, floribus ð furcaturâ sessilibus." p. 241.—In nemoribus *Pillao*, ad Chacahuassi tractus.

**FERN. conferta.**

F. "foliis linearibus integerrimis reflexis, caule radicante, ramis confertis, floribus axillaribus solitariis." p. 241.—Cum præcedentibus.

**CXXVII. PACHYPHYLLUM.**

*Pachyphyllum.* *Humb. et Kunth. N. G. et Sp.* 1. 339. *Fernandezia. Fl. Per. Prodr.* t. 27. f. 2. 3. 4.

*Perianthium connivens.* Sepala et petala libera, æqualia, acuta. Labellum liberum, indivisum, sessile, basi unituberculatum, apice bituberculatum. Columna petaloidea. Pollinia 2.—Herba epiphyta, caulescens, foliis distichis, spicis axillaribus recurvis bifariâ imbricatis. Flores inconspicui.

1. **PACHYPHYLLUM distichum.** *Humb. et Kunth. N. G. et Sp.* 1. 339. t. 77. *Synops.* 1. 328.

Hab. in arboribus *Peruviæ*, prope Loxam et Gonzanam, alt. 1070 hexap. *Humb. et Bonpl.*

Flores virides, ex axillis distichè spicati, bracteis bifariis more *Palmarum*.

**CXXVIII. DICHÆA.**

*Dichæa.* *Lindl. in Hooker. Bot. Miscell. ined. Fernandezia. Fl. Per. Prodr.* t. 27. f. 1.

*Perianthium connivens.* Sepala et petala libera, acuta, æqualia. Label-  
lum unguiculatum, nudum, ecalcaratum, deltoideum, cum columna  
articulatum. Columna erecta, teres, aptera. Anthera bilocularis. Pol-  
linia 4, geminata, collateralia (oo oo) caudiculâ cuneatâ, glandulâ  
minutâ.—Epiphytæ, caulescentes, repentes. Folia parva, disticha.  
Flores solitarii, axillares, minuti.

1. **DICHÆA echinocarpa.**

D. caule pendulo, foliis ovatis acutis, labello pubescente sagittato, capsu-  
lâ subrotundâ echinatâ.

*Epidendrum echinocarpon.* *Swartz. Prodr.* 124.

*Cymbidium echinocarpon.* *Swartz. Fl. Ind. Occ.* 1452.

*Limodorum pendulum.* *Aubl. Guian.* t. 322.

Hab. in *Guiana*, Aublet; ad latera saxorum arborumque inter muscos, in  
umbrosis montium *Jamaicæ australis*, *Swartz*; in *Mexico*, dom. *Graham*.  
(*hab. s. sp.*)

2. **DICHÆA latifolia.**

D. caule pendulo, foliis oblongis obtusis apiculatis, capsulis longè pedun-  
culatis angustis oblongis echinato-villosis.

Hab. in insula *Si. Vincentii*, *Guilding.* (*v. s. sp. in herb. Hooker.*)

D. *echinocarpe* valdè affinis; foliis latioribus obtusissimis, et fructus super-  
ficie satis diversa.

3. *DICHÆA muricata*.

*D. foliis ovato-oblongis acuminatis, labello . . . , capsulâ muricatâ.*

*Cymbidium muricatum. Swartz. / Fl. Ind. Occ. 1454.*

*Hab. in truncis muscosis arborum, versus juga montium Jamaicae australis, Swartz. (v. s. sp. in herb. Hooker. ex Dom. Bancroft.)*

*Mera videtur varietas D. echinocarpæ. Folia latiora; flores majores, gibbosiores, glabræ, sec. Swartz. icon.*

*Verosimiliter adest etiam in Brasilia.*

4. *DICHÆA trichocarpa*.

*D. foliis linearibus subreflexis, labello subrotundo concavo, capsulâ subrotundâ albo-hirsutâ.*

*Epidendrum trichocarpum. Swartz. Prodr. 124.*

*Cymbidium trichocarpum. Swartz. / Fl. Ind. Occ. 1455.*

*Hab. in truncis muscosis arborum, versus juga montium Jamaicae australis, Swartz. (v. s. sp. defl. in herb. Vahl.)*

5. *DICHÆA graminoides*.

*D. caulibus erectis, foliis linearibus acutis, petalis sepalisque acutis, labello cuneato-sagittato, capsulâ glabrâ.*

*Epidendrum graminoides. Swartz. Prodr. 125.*

*Cymbidium graminoides. Swartz. / Fl. Ind. Occ. 1459.*

*Ischilus graminoides. Hooker. Exot. Fl. t. 196.*

*Hab. in arbores regionis temperatæ montium Jamaicae australioris, Swartz; in Guiana, insula Trinitatis et Demerara, Purker. (hab. s. sp. comm. clar. Hooker.)*

*Variat longitudine foliorum.*

6. *DICHÆA Panamensis. Lindl. in Bot. Misc. ined.*

*D. caule erecto, foliis glaucis linearibus acutis rectis, pedunculis capillariibus, labello ovato subsagittato, fructu glabro.*

*Hab. in Panama, et Columbia occidentali, Cuming no. 1292. (hab. s. sp.)*

7. *DICHÆA glauca*.

*D. caule compresso erectiusculo, foliis lineari-oblongis acutis subtus glaucis, capsulis glabris.*

*Epid. glaucum. Swartz. Prodr. 124.*

*Cymbidium glaucum. Swartz. Fl. Ind. Occ. 1457.*

*Hab. in arboribus versus summum jugum montium cæruleorum Jamaicae australis, Swartz. (v. s. sp. defl. in herb. Hooker.)*

*Maxima generis. Caulis 1-2-pedalis. Flores albidi, parvi.*

## CXXXIX. PHYMATIDIUM.

*Sepala et petala subæqualia, patentia, libera, membranacea. Labellum subunguiculatum, indivisum, basi callosum. Columna libera, alato-marginata, basi tumida. Anthera . . . —Herbæ pusillæ, acaules, ebulbes. Folia gracilia, racemis breviora. Flores distichi racemosi.*

1. *PHYMATIDIUM* delicatulum.

*P. foliis brevibus lineari-subulatis, bracteis distichis acerosia, petalis sepalisque acutis, labello rhomboideo acuto.*

*Hab. in insula Sæ. Catharinæ, Brasilia, Fischer. (hab. s. sp.)*

2. *PHYMATIDIUM* falcifolium.

*P. foliis longis subulatis falciformibus, bracteis membranaceis, petalis obtusissimis, labello suborbiculari basi undulato.*

*Hab. in Brasilia, Prescott. (hab. s. sp.)*

## CYRTOCHILUM.

*Cyrtochilum. Humb. et Kunth. Nov. Gen. et Sp. 1. 335.*

*Perianthium explanatum. Sepala libera, lateralia unguiculata. Petala paulò minora. Labellum ecalcaratum, indivisum, ungue tuberculato cum basi columnæ continuo. Columna brevis, alata. Anthera bilocularis. Pollinia 2, caudiculâ filiformi, glandulâ minutâ. — Herbæ epiphytæ, v. terrestres, pseudobulbosæ. Folia coriacea. Scapi radicales, paniculati. Flores speciosi.*

1. *CYRTOCHILUM* undulatum. *Humb. et Kunth. N. G. et Sp. 1. 349. t. 84. Synops. 1. 335.*

*C. "foliolis calycinis ovatis, undulatis, patentibus."*

*Hab. locis rupestribus Andium Novogranatensium aëre temperato utentibus, prope pagum La Ascension et Paramo de los Papas, alt. 1045 hexap. Humb. et Bonpl.*

*Folia lanceolato-oblonga, 11-13-nervia, subpedalia. Scapus orgyalis, apice ramosissimus, paniculatus. Flores fuscescentes, albo flavoque maculati. Labellum ovato-lanceolatum, convexum, basi tuberculis numerosis cristatum, sepalis triplò brevius, exterius roseum, interius flavum, maculis rubris et albis variegatum. Kunth.*

2. *CYRTOCHILUM* flexuosum. *Humb. et Kunth. N. G. et Sp. Pl. 1. 350. Synops. 1. 336.*

*C. "foliolis calycinis undulatis, reflexis, exterioribus spathulatis, interioribus obovatis."*

*Hab. in radicibus altissimi montis, Paramo de las Achupallas, inter urbem Almaguer et pagum La Cruz alt. 1580 hexap. Humb. et Bonpl.*

*Pseudobulbi oblongi, 3-pollicares. Folia oblongo-lanceolata, acuminata, basi valdè angustata, coriacea, 11-13-nervia, pedalia et longiora, 2-poll. lata. Scapus plurium pedum altitudine, ramosissimus, ramis triangularibus. Sepala spatulata, undulata; petala obovata breviora. Labellum ovatum acutum, convexum, basi tuberculato-cristatum, sepalis triplò brevius. Kunth.*

3. *CYRTOCHILUM* pardinum. *Lindl. in Hooker. Bot. Miscell. ined.*

*C. foliis lineari-oblongis basi angustatis striatis, petalis undulatis sepalisque angustioribus lanceolatis, labello unguiculato ovato-lanceolato: unguis axi cum columna connato utrinque lamellato; callis quibusdam elevatis inæqualibus linearibus productioribus e medio.*

Hab. in *Peruvia*, in sylvâ inter Cumbe et Jima ad viam Loxæ, cùm epiphytum tùm terrestre; Novembri florens invenit *Jamieson*; etiam ad *Surucacho*. (*exam. s. sp. in herb. Hooker.*)

4. *CYRTOCHILUM* ixioides.

C. foliis membranaceis lineari-lanceolatis striatis, scapo simplici apice racemoso, labello oblongo obtuso basi bilamellato medio 5-tuberculato.

Hab. in regno *Novogranatensi* locis humidis *Paramo S. Fortunato*, *Gudot*. (*hab. s. sp.*)

Scapus  $1\frac{1}{2}$ -pedalis. Sepala ovata, unguiculata. Petala conformia sessilia. Flores verosimiliter lutei.

### CXXXI. ODONTOGLOSSUM.

*Odontoglossum. Humb. et Kunth. Nov. Gen. et Sp. 1. 351.*

*Perianthium explanatum, æquale; sepalis petalisque angustis acuminatis liberis. Labellum indivisum, ecalcaratum, unguiculatum; ungue cum basi columnæ continuo; laminâ patente basi cristatâ. Columna erecta, membranaceo-marginata, apice utrinque alata. Anthera bilocularis. Pollinia 2, solida, caudiculâ lineari, glandulâ hamatâ.*—*Herbæ epiphytæ, pseudobulbiferæ. Folia plicata. Scapus terminalis, vaginatus. Flores speciosi. Character ex Kunthio.*

1. *ODONTOGLOSSUM* epidendroides. *Humb. et Kunth. N. G. et Sp. Pl. 1. 351. t. 85.*

O. pseudobulbis ovato-oblongis compressis, foliis lanceolatis subcoriaceis, scapo erecto multifloro, sepalis petalisque acuminatis undulatis, labello unguiculato oblongo obtuso undulato-crenato, basi trituberculato.

Hab. in regione subcalida Provinciæ *Bracamorensis*, inter flumen Amazonum et urbem Jaen, alt. 240 hexap. *Humb. et Bonpl.*

Scapus  $1\frac{1}{2}$ -pedalis. Flores lutei, inodori, maculati.

2. *ODONTOGLOSSUM* cirrhosum. *Lindl. in Hooker. Bot. Misc. ined.*

O. sepalis lanceolatis petalisque latioribus undulatis acuminatissimis maculatis labello longioribus, labelli laminâ cordatâ acuminatissimâ, columnâ apice apterâ bicirrhosâ.

Hab. in *Guayaquil*; in valle Mindo alt. 1000 hexap. invenit *Hall. (exam s. sp. in herb. Hooker.)*

Flores verosimiliter flavi, maculis quibusdam magnis, et interveniis labelli, purpureis.

3. *ODONTOGLOSSUM* maculatum. *Llave Orch. Mex. 2. 35.*

O. "bulbis ovatis subancipitibus monophyllis; foliis lanceolatis conduplicatis; scapo elongato depresso multifloro; floribus bicoloribus maculatis; lamina labelli integra cordata acuminata."

Hab. in *Mexico* supra arbores in montibus *Irapæi*, *Jesus del Monte* prope *Vallisoletum*. *Llave.*

*Pseudobulbi ancipites, 1-phylli. Scapus simplex. Sepala lanceolata, castaneo-fusca, carinata, acutissima; petala majora, lurida, venosa, paulò breviora. Labellum basi carnosum, biauriculatum, dentibus 2 incurvis, laminâ cordatâ, acuminatâ, maculatâ. Llave.*

4. *ODONTOGLOSSUM Cervantesii*. *Llave. Orch. Mex. 2. 34.*

O. "bulbis ovatis ancipitibus confertis; foliis solitariis lanceolatis, basi attenuatis bulbo innatis; scapo distichè vaginato; floribus longè pedunculatis; gynostemio alato."

Hab. in montibus *Mexici* prope *Irapæum*; *Llave*.

Planta habitu gracillima, odore grato. Pseudobulbi lenticulares, v. ancipites, pollicares, monophylli. Scapus flexuosus. Flores nivei, maculis concentricis versus basin purpurinis aut sanguineis variegati. Labellum ungue bilobo lutescente: dentibus duobus instructo; lamina cordatâ, nervosâ, undulatâ, sublaceratâ.

5. *ODONTOGLOSSUM apterum*. *Llave Orch. Mex. 2. 35.*

O. "bulbis ovatis depressis; foliis lato-lanceolatis nervosis conduplicatis; scapo tereti paucifloro; gynostemio aptero crasso."

Hab. cum præcedente; *Llave*.

Præcedenti simillimum. Labellum petaloideum, crenatum.

CXXXII. *BRASSIA*.

*Brassia*. *R. Brown. in Hort. Kew. ed. 2. 5. 215.*

Perianthium explanatum. Sepala et petala angusta, libera, æqualia; his nunc minoribus. Labellum planum, indivisum, ealcaratum, columnâ continuum, basi bi-cristatum. Columna libera, aptera, nana. Anthera 1-locularis. Pollinia 2, posticè sulcata, caudiculâ brevi, glandulâ crassâ.—Epiphytæ pseudobulbosæ. Folia pergamenea. Scapi radicales vaginati. Flores speciosi, spicati.

1. *BRASSIA maculata*. *Brown. in Hort. Kew. 5. 215. Bot. Mag. t. 1691.*

B. sepalis petalisque linearibus acuminatis æqualibus, labello postico subrotundo emarginato.

Hab. in *Jamaica*. (v. v. c.)

2. *BRASSIA caudata*. *Lindl. in Bot. Reg. t. 832.*

B. sepalis ovato-lanceolatis acuminatis: lateralibus longissimis, petalis acutis minoribus, labello acuminato.

*Helleborine* ramosissima, caulibus et floribus maculosis. *Plum. Sp. 9. t. 277.*

*Epidendrum caudatum*. *Linna. Sp. Pl. 1349.*

*Malaxis caudata*. *Willd. Sp. Pl. 4. 93.*

Hab. in *India occidentali*. (v. v. c.)

CXXXIII. *TETRAPELTIS*.

*Tetrapeltis*. *Wall. Mus. Lindl. in Bot. Reg. 1522.*

Perianthium subpatens. Sepala libera, æqualia. Petala angustissima, æquilonga. Labellum liberum, sessile, saccatum, geniculatum, trilobum, lobis lateralibus abbreviatis, intermedio indiviso. Columna erecta, petalorum longitudine, semiteres, clavata; clinandrio cucullato; rostello rostrato recto. Pollinia 4, globosa, posticè foveata; geminatim caudiculis duabus angustis glandulâ communi connexis adhærentia.—Herba epiphyta, caulescens. Caules squamis vaginati, curvi. Folia

geminata, lanceolata, plicata. Spica erecta, multiflora, foliis brevior. Flores albi.

1. *TETRAPELTIS fragrans*. Wallich.  *Ic. ined.*

Hab. verosimiliter in *Nupalia*. (v. ic. in bibl. *Angl. Ind.*)

Caulis ascendens, brevis, squamatus, teres, internodio ultimo 3-pollicari, angulato, subnudo. Folia bina, brevius petiolata, oblongo-lanceolata, 6-8 unc. longa, plicata. Racemus terminalis, erectus, 6-unc. long. à latere baseos foliorum, basi squamis viridibus vaginatus; rachi flexuosâ. Bracteæ deciduæ. Flores albi. Sepala uncialia, lineari-lanceolata. Petala linearia. Labelli lobi laterales acutiusculi, intermedius ovato-lanceolatus acutus, medio sulcatus.

#### CXXXIV. PHALÆNOPSIS.

*Phalænopsis*. Blume *Bijdr.* 294. tabellen. 44.

Perianthium explanatum, patens, sepalis liberis, petalis majoribus dilatatis. Labellum cum basi paulò productâ columnæ connatum, liberum, basi callosum, trilobum; lobis lateralibus ascendentibus petaloideis, intermedio angustiore bicirrhoso. Columna in ovarium recumbens, semiteres; rostello gladiato. Anthera bilocularis. Pollinia 2, subglobosa, caudiculâ planâ spatulatâ, glandulâ maximâ cordatâ.—Herba epiphyta. Caules radicanter, simplices. Folia rigida, lato-lanceolata, apice obliquè retusa. Flores paniculati.

Character ex Blume.

1. *PHALÆNOPSIS amabilis*. Blume *l. c.*

*Epidendrum amabile*. Linn. *Sp. Pl.* 1351. Willd. *Sp. Pl.* 4. 115.

*Angræcum album majus*. Rumph. *Amb.* 6. 99. t. 43.

Hab. in sylvis littoralibus *Nusæ Kamangæ* insulæ, Blume; *Amboyna*, Rumphius.

Folia bina, oblonga, coriacea, radicalia, pseudobulbo nullo. Scapus pedalis et ultra, 3-4-florus. Flores magni, albi. Sepala oblonga, obtusa. Petala suborbiculata, unguiculata. Labellum laciniis lateralibus ovatis, obtusis, incurvis, versus basin lutescentibus; basi callo elevato, truncato, luteo, sagittato instructum.

#### CXXXV. TRICHOGLOTTIS.

*Trichoglottis*. Blume *Bijdr.* 359. tabellen 8.

Perianthium explanatum, patens; sepalis lateralibus labello suppositis. Labellum cum marginibus columnæ connatum, saccatum, utroque margine cornutum, limbo carnoso indiviso; callo saccum subclaudente. Columna erecta, basi unicornis. Anthera 2-locularis. Pollinia 2, globosa, biloba, caudiculâ unicâ lineari, glandulâ parvâ hamatâ v. peltatâ.—Herbæ epiphytæ, subramosæ, radicanter. Folia coriacea aut carnosa. Pedunculi laterales v. oppositifolii, brevissimi, pauci aut 1-flori.

Character ex Blume.



§. 1. *Labellum utrinque dente acuto inflexo auctum, intus pubescens; limbus patens. Columna apice utrinque dente instructa. Pollinia inæqualia.*

1. *TRICHOGLOTTIS retusa. Blume l. c. t. 8.*

T. "foliis linearibus retusis rigidis, floribus lateralibus subsolitariis, labelli limbo piloso."

Hab. in *Java*, in sylvis montanis Provinciarum Buitenzorg et Bantam, Blume.

2. *TRICHOGLOTTIS lanceolaria. Blume l. c.*

T. "foliis lineari-lanceolatis coriaceis, pedunculis paucifloris oppositifoliis, labelli limbo imberbi."

Hab. in *Java*, circa Buitenzorg et in sylvis montis Pantjar, Blume.

§. 2. *Labellum intus imberbe, dentibus lateralibus obtusis; limbus abbreviatus subfornicatus. Columna obtusa. Pollinia æqualia, basi sulcata.*

3. *TRICHOGLOTTIS rigida. Blume l. c.*

T. "foliis lineari-lanceolatis carnosis, floribus oppositifoliis subsolitariis, labelli limbo dentibusque lateralibus callosis."

Hab. in *Java*, in sylvis altioribus Salak, Blume.

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#### CXXXVI. TELIPOGON.

Teliogon. *Humb. et Kunth. Nov. Gen. et Sp. Pl. 1. 336.*

Perianthium explanatum. Sepala angusta, acuta. Petala latè ovata. Labellum petalis conforme, sed paulò majus. Columna pilosa, teres, clinandrio posticè processu subulato uncinato instructo. Anthera unilocularis, altè bivalvis, processu clinandrio pedicello elongato fistuloso uncinato affixa. Pollinia 4, caudiculâ.... glandulâ.—Herbæ epiphytæ. Caules foliosi, pauciflori. Flores terminales, subspicati, pedicellati, flavescentes.

Char. ex Kunth. An partes ritè descriptæ.

1. *TELIPOGON angustifolius. Kunth l. c. t. 75.*

T. "foliis lineari-lanceolatis, acuminatis; labello imberbi."

*Tradescantia nervosa. Willd. Sp. Pl. 2. 18.*

Hab. supra arbores in locis temperatis regni *Notogranatensis*, juxta Sa. Anna Maraquitã, alt. 400 hexap. Humb. et Bonpl.

Flores flavescentes.

2. *TELIPOGON latifolius. Kunth. l. c.*

T. "foliis lanceolato-oblongis, acutis; labello basi barbato."

Hab. in regione ferventissima Provinciæ Jaen de Bracamoros, inter pagos Choros et Tomependa, juxta confluentem et Chinchipes fluminis Amazonum; Humb. et Bonpl.

Præcedente omnibus partibus major.

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## CXXXVII. VANDA.

Vanda. *R. Brown in Bot. Reg. t. 506. (1820.)*—*Luisia. Gaudich. Voyage. t. 37.*—*Fieldia. Id. 424.*

Perianthium explanatum, patens, petalis sepalisque subæqualibus. Labellum saccatum, v. obconico-calcaratum, cum basi columnæ continuum, subtrilobum: lobo medio carnosio. Columna crassa, libera, abbreviata, rostello obtuso. Anthera bilocularis. Pollinia 2, obliquè biloba, caudiculâ lineari, glandulâ subrotundâ.—Herbæ epiphytæ, caulescentes. Folia disticha, coriacea. Spicæ oppositifoliæ. Flores speciosi.

1. VANDA Roxburghi. *R. Brown in Bot. Reg. 506.*

V. foliis apice obliquè tridentatis, racemis erectis foliis longioribus, sepalis petalisque oblongo-obovatis undulatis obtusis, labelli lobo medio ovato emarginato.

Vanda. *Str W. Jones in As. Res. 4. 302.*

Cymbidium tesselloides. *Roxb. Fl. Ind. Mus.*

Hab. in India orientali, supra arbores præsertim Mangiferæ, Roxburgh, Wallich. (hab. s. sp. comm. cel. Wight.)

2. VANDA furva.

Angræcum furvum. *Rumph. Amb. 6. t. 46. f. 1.*

Epidendrum furvum. *Linn. Sp. Pl. 1348.*

Cymbidium furvum. *Willd. Sp. Pl. 4. 103.*

Hab. in Amboyna, Rumphius.

This obscure species was originally taken up by Linnæus, apparently from the figure above referred to in Rumphius; for he adopts the name of that author, although he also cites the wholly different plant figured in Rheede's Hortus Malabaricus, vol. 12. t. 4, which is a representation of Saccolabium papillosum. There is nothing in either the figure or description of Rumphius' A. furvum, that would not apply well enough to Vanda Roxburghi; but as it is impossible to say to which it belongs, without some Amboyna specimen, and as it may be different from either, I leave it as a mark to which future botanists may direct their attention.

3. VANDA longifolia. *Lindl. in Wall. Cat. no. 7322.*

V. foliis longis loratis apice obliquis obtusissimis, racemis horizontalibus foliis triplè brevioribus, sepalis oblongis obtusis (undulatis?), petalis angustioribus, labelli hypochilio concavo pubescente apice rotundato: cristâ carnosâ per axin, epichilio subrotundo-ovato obtuso.

Hab. in Tavoy, Wallich. (hab. s. sp. e Mus. Angl. Ind.)

Folia pedalia et ultra. Flores minores, carnosi.

4. VANDA gigantea. *Lindl. in Wall. Cat. no. 7336.*

V. foliis latè loratis apice obtusissimis emarginatis subæqualibus, racemis foliis duplè brevioribus, sepalis petalisque oblongo-obovatis obtusis, labello incurvo canaliculato basi cordato apice dolabriformi obtuso: callo conico in medio.

Hab. in Moatmyne, Wallich. (hab. s. sp. e Mus. Angl. Ind.)

Folia sesquipedalia, 2½ poll. lata, carnosâ. Flores magnitudine V. Roxburghi.

May, 1833.

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5. *VANDA spatulata*. *Spreng. Syst.* 3. 719.

V. foliis ovato-oblongis obtusis obliquè emarginatis, racemis erectis multifloris foliis et caule multò longioribus, sepalis petalisque oblongis obtusis planis, labelli hypochilio anticè bicalloso epichilio rhomboideo apice incurvo medio cristato, ovario hexaptero.

*Ponnampou maravara. Rheede 12. t. 3.*

*Epidendrum spatulatum. Linn. Sp. Pl.* 1348.

*Limodorum spatulatum. Willd. Sp.* 4. 125.

*Aerides maculatum. Smith ! in Rees suppl.*

Hab. in *Mysore, Buchanan, Wight.* (hab. s. sp. comm. cel. *Wight.*)

Species pulcherrima. Folia et racemi guttulis sanguineis notati. Flores aurei, immaculati; hypochilio intùs albo.

6. *VANDA peduncularis*.

V. foliis loratis apice altè et obliquè bilobis, pedunculo longissimo filiformi subramoso apice paucifloro corymboso, sepalis oblongis obtusis, petalis duplè minoribus, labello oblongo retuso villosa basi bilamellato.

Hab. in *Zeylona*, supra arbores, *Macrae.* (hab. s. sp. et ic. pict.)

Pedunculus sesquipedalis, purpureus. Flores magnitudine et facie *Ophrydis* apiferæ. Sepala et petala pallidè viridia, purpureo striata. Label- lum purpureum, viridi marginatum.

7. *VANDA multiflora. Lindl. Collect. Bot.* t. 38.

V. foliis loratis apice obliquis emarginatis, pedunculis subramosis erectis subcorymbosis foliis brevioribus, sepalis petalisque oblongis obtusis maculatis subæqualibus, labello ecristato: lobo medio ovato acutiusculo.

*Aerides rigidum. Smith ! in Rees Suppl.*

Hab. in *China*; in *Napalia, Hamilton, Wallich.* (v. ic. pict. et v. c.)

Flores inter minores, lutei, sanguineo punctati.

8. *VANDA lissochiloides*.

V. foliis ensiformibus emarginatis racemo multifloro terminali brevioribus, sepalis petalisque oblongis obtusis, labello oblongo canaliculato apice uncinato.

*Fieldia lissochiloides. Gaudich. Voy.* 424. t. 36.

Hab. in insulis *Moluccis*, *Gaudichaud.*

Epiphyta, rhizomate repenti articulo. Folia longa, ensiformia, coriacea, emarginata, 12-15 uncias longa. Scapus terminalis, simplex, 1-3-pedalis. Spica multiflora. Flores speciosi, lutei, purpureo maculati. Bractæ breves, ovatæ, rigidæ. Sepala et petala æqualia, oblonga, obtusa. Labellum oblongum, apice uncinatum, canaliculatum, basi saccatum et utrinque lobis duobus parvis ascendentibus instructum. Caudicula cuneata. Glandula maxima, hamata.

9. *VANDA cristata. Lindl. in Wall. Cat. no.* 7328.

V. foliis canaliculatis recurvis apice truncatis obliquè excisis tridentatis, racemo erecto trifloro foliis brevioribus, sepalis oblongis obtusis fornicatis, petalis angustioribus, labelli lobis lateralibus brevibus acutis intermedio vittato oblongo convexo apice saccato inæqualiter tricorni.

*Aerides cristatum. Wallich. Ic. ined.*

Hab. in *Napalia*, *Wallich*. (*hab. s. sp. e Mus. Angl. Ind.*)

Flores albi, viridi tincti. Labellum album, villis maculisque atropurpureis.

10. *VANDA teres*. *Lindl. in Wall. Cat. no. 7324.*

V. foliis teretibus, racemis ascendentibus sub-bifloris foliis æqualibus, sepalis oblongis obtusis: supremo erecto lateralibus semitortis labello suppositis, petalis majoribus suborbiculatis undulatis, labello basi conico: laciniis lateralibus ascendentibus subtruncatis intermediâ pubescente apice dilatatâ truncatâ emarginatâ.

*Dendrobium teres*. *Wallich Mus.*

Hab. in *Sylhet*, *Wallich*. (*hab. s. sp. e Mus. Angl. Ind.*)

Flores omnium maximi, 4½ uncias ab apice unius petali ad apicem alterius.

#### CXXXVIII. RENANTHERA.

*Arachnis*. *Blume Bijdr. 365. tabellen 26.* *Aerides*. *Blume Bijdr. 366. tab. 24.*

*Renanthera*. *Loureir. Fl. Coch. 521.*

Perianthium explanatum, patens. Sepala et petala linearia, subæqualia, v. lateralibus majoribus. Labellum liberum, nanum, cum columna elasticè articulatam, trilobum, medio saccatum; lobo medio carnoso. Columna aptera, abbreviata, erecta. Anthera bilocularis. Pollinia 2, biloba, caudiculâ unicâ, glandulâ subtriangulari peltatâ.—Herba epiphyta, caulescens. Caulis radicans, ramosus, altissimè scandens. Folia coriacea. Flores paniculati, speciosi.

1. *RENANTHERA coccinea*. *Lour. Fl. Coch. 2. 637. Bot. Reg. t. 1131. Bot. Mag. t. 2997.*

R. caule disticho folioso, foliis apice obliquis emarginatis, paniculis lateralibus multifloris, sepalis lateralibus unguiculatis undulatis lanceolatis obtusis superiore petalisque lineari-spatulatis longioribus, labelli lobis lateralibus truncatis: intermedio linguiformi reflexo.

*Hung too han*.  *Ic. Sin. in Bibl. Soc. Hort. no. 45.*

Hab. in *Cochinchina*, supra arbores, *Loureiro*; nunc in hortis *Chinensium* vulgata, (v. v. c.)

Flores sanguinei.

2. *RENANTHERA arachnites*.

R. caule altissimè scandente, foliis lanceolatis, sepalis petalisque arcuatis æqualibus linearibus apice latioribus, labelli hirsuti lobis ovatis subæqualibus: intermedio intus cristato apice bidentato.

*Angurek Katong-ging*. *Kempf. Amen. 868. c. ic.*

*Epidendrum flos æris*. *Linn. Sp. Pl. 1348.*

*Limodorum flos æris*. *Swartz. Nov. Act. Ups. 1740. p. 37.*

*Aerides arachnites*. *Swartz in Schrad. Journ. 1799. p. 233. Willd. Sp. Pl. 4. 131.*

*Arachnis moschifera*. *Blume Bijdr. 365. t. 26.*

Hab. in *Japonia*, *Kämpfer*; indè in hortis *Javæ* adducta, *Blume*.

3. *RENANTHERA Sulingi*.

R. "caulibus subramosis, foliis linearibus retusis, spicis simplicibus paucifloris, sepalis subæqualibus obtusiusculis, limbo ovato incrassato tuberculis lineato."

*Aerides Sulingii*. *Blume l. c.*

Hab. in *Java*, in rupibus ad montem Suling, provinciæ Buitenzorg, Blume  
Flores sordidè purpurascentes.

4. *RENANTHERA elongata*.

R. "caule ramoso, foliis lato-linearibus obliquè emarginatis, paniculis elongatis nutantibus, sepalis exterioribus lateralibus internis latioribus spatulatis, labelli limbo ovato basi bicalloso."

*Aerides elongatum*. *Blume l. c.*

Hab. in *Java*, in rupibus calcareis prope Kuripan, Blume.

Flores punicei.

5. *RENANTHERA matutina*.

R. "caule ramoso, foliis linearibus obliquè retusis, pedunculis paniculatis nutantibus, sepalis lateralibus exterioribus connexis; labelli limbo ovato abbreviato."

*Aerides matutinum*. *Blume l. c. t. 24.*

Hab. in *Java*, in arboribus ad radicem montis Salak; Blume.

Flores coccinei, pulchelli.

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CXXXIX. DIPLOCENTRUM.

*Diplocentrum*. *Lindl. in Bot. Reg. 1522.*

Perianthium subclausum, liberum. Sepalum supremum lateralibus paululò obliquis multò minus. Petala sepalo supremo paululùm majora. Labellum cum columna articulatum, indivisum, bicalcaratum. Columna minuta, semiteres, rostello obtuso. Pollinia 2? caudiculâ subulatâ, glandulâ maximâ concavâ.—Epiphyta, caulescens. Folia complicata, carnosa, recurva. Racemi paniculati, recurvi. Flores minuti. Calcaria brevia, obconica, incurva.

1. *DIPLOCENTRUM recurvum*. *Lindl. in Wall. Cat. no. 7331.*

Hab. in *India Orientali*, Heyne (*hab. s. sp. e Mus. Angl. Ind.*)

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CXL. MICROSACCUS.

*Microsaccus*. *Blume Bijdr. 367.*

Sepala linearia, lateralia labello adnata. Petala conformia. Labellum columnæ anticè adnatum, basi saccatum; limbo abbreviato fornicato. Columna nana, aptera, obtusa. Anthera semibilocularis. Pollinia 4, obovata, basi foveata, caudiculâ unicâ.—Herba epiphyta, pusilla. Caules simplices, compressi. Folia scalpelliformia, equitantia, rigida. Pedunculi intrafoliacei, pauciflori.

Character ex Blume.

1. *MICROSACCUS Javensis*. *Blume l. c.*

Hab. in *Java*, in sylvis montis Salak supra arbores, Blume.

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## CXLI. CAMAROTIS.

Perianthium explanatum. Sepala lateralialia invicem et cum dorso labelli connata, apice libera. Petala paululum minora, libera. Labellum obovatum, canaliculatum, apice monocameratum, appendiculatum. Columna erecta, teres, libera, longissimè sigmoideo-rostrata: anthera dorsali, apiculata, semibiloculari. Pollinia 2; caudiculâ longissimâ, subulata; rostello forficato.—Caulescens. Folia disticha, coriacea. Racemi axillares, multiflori.

1 CAMAROTIS purpurea. *Lindl. in Wall. Cat. no. 7329.*

Hab. in *Sylhet, Wallich* (*hab. s. sp. e Mus. Angl. Ind. et v. ic. pict.*)

Folia emarginata, oblongo-linearialia, apice subæqualia. Flores pallide purpurei, labello apice intensiore. Labellum apice sub appendiculo subulato inflexo foramine instructum, quod os est cameræ calceiformis, totum apicem labelli constituentis; latera labelli paululum agglutinantur, sed margines patuli.

## CXLII. CHILOSCHISTA.

Chiloschista. *Lindl. in Bot. Reg. 1522.*

Perianthium subpatens. Petala sepalis majora, cum sepalis lateralibus basi longè productæ columnæ adnata. Labellum cum ungue columnæ articulatum, bipartitum, medio cristatum. Columna minima, erecta, semiteres. Pollinia 2, caudiculâ brevi, subulata, glandulâ minutâ.—Herba humilis, epiphyta, hirsuta, aphylla; radicibus complanatis viridibus (quasi foliaceis!). Spicæ erectæ. Flores albi, odorati.

1. CHILOSCHISTA usneoides. *Lindl. in Wall. Cat. no. 7330.*

Epidendrum usneoides. *Don. Prodr. Nep. 37.*

Hab. in *Napalia, Wallich* (*hab. s. sp. e Mus. Angl. Ind. et v. ic. pict.*)

Racemi 5 uncias longi; ovariis pubescentibus.

## CXLIII. MICROPERA.

Micropera. *Lindl. in Bot. Reg. 1522.*

Perianthium æquale, patens, sepalis lateralibus basi labelli adnatis. Labellum cum basi columnæ continuum, calceiforme, leviter trilobum, lobo intermedio minimo, lateralibus majoribus erectis. Columna brevis, rostello maximo inflexo. Pollinia 2, caudiculâ subulata.—Epiphyta, caulescens. Folia disticha, linearialia, arcuata, apice æqualia, emarginata. Spicæ laterales, horizontales, foliis breviores. Flores citrini.

1. MICROPERA pallida. *Lindl. in Wall. Cat. no. 7321.*

Hab. in *Sylhet, Wallich*. (*hab. s. sp. e Mus. Angl. Ind. et v. ic. pict.*)

Caulescens. Folia latè linearialia, apice obliqua, subtridentata. Racemi breves, 8-15-flori. Flores pallide flavi, mediocres. Capsulæ angustæ, teretes, 2 uncias longæ.

## CXLIV. SACCOLABIUM.

*Saccolabium*. *Blume Bijdr.* 292. *tabellen* 50. — *Gastrochilus*. *Don. Prodr. Nep.* 32. — *Robiquetia*. *Gaudich. Voyage*, 426. — *Gussonea*. *Ach. Rich. Orch. Maur.* 76. — *Rhyncostylis*. *Blume l. c.* 285. *t.* 49.

*Perianthium explanatum*, patens. Sepala petalis æqualia, lateralia sæpiùs majora. Labellum indivisum, calcaratum, basi columnæ accretum. Columna erecta, semiteres, rostello subulato. Anthera semibilocularis. Pollinia 2, subglobosa, caudiculâ elongatâ, glandulâ minutâ. — *Herbæ epiphytæ*, caulescentes. Folia disticha, coriacea, apice sæpiùs obliqua. Flores axillares, racemosi v. solitarii.

§ I. *Labelli calcar perianthio patenti æquale, v. brevius; apice sæpius in laminam petaloideam productum.*

1. *SACCOLABIUM pusillum*. *Blume Bijdr.* 292. *t.* 50.

S. *pusillum* caulescens, foliis linearibus rigidis distichis, floribus axillaribus subpedicellatis solitariis.

Hab. in *Java*, in sylvis altis montis Gede, *Blume*.

2. *SACCOLABIUM micranthum*. *Lindl. in Wall. Cat. no.* 7300.

S. foliis oblongo-loratis apice obliquis obtusis altè bilobis, racemis cernuis densifloris foliis brevioribus, sepalis subrotundo-ovatis, petalis linearibus obtusis, labelli calcare subrotundo : laminâ obovatâ obtusâ v. acutâ basi callo reflexo instructâ.

Hab. in *Napalia*, et *Sylhet*, *Wallich (hab. s. sp. e Mus. Angl. Ind. et v. ic. pict.)*

Species parva, pulchella. Folia 2-3 poll. longa. Flores parvi. Sepala et petala violacea : labellum intensè roseum.

3. *SACCOLABIUM densiflorum*. *Lindl. in Wall. Cat. no.* 7311.

S. foliis lorato-oblongis apice obliquis obtusis emarginatis, racemis densis cylindraceis foliis æqualibus v. brevioribus, floribus extùs scabris, sepalo supremo fornicato, labello infundibulari : apice calcaris ventricosi quater gibboso : laminâ acuminatâ.

*Aerides densiflorum*. *Wall. Ic.*

Hab. in *Sylhet* et *Penang*, supra arbores et saxa, *Wallich (hab. s. sp. e Mus. Angl. Ind. et v. ic. pict.)*

Folia circiter 6 uncias longa, 1 lata, atro-viridia. Sepala et petala intùs roseo-lateritia, medio alba, extùs fusca. Labellum lutescens, anticè rubescens.

4. *SACCOLABIUM guttatum*. *Lindl. in Wall. Cat. no.* 7308.

S. foliis longis canaliculatis inæqualiter truncatis arcuatis racemis cylindraceis densifloris arcuatis æqualibus, sepalis ovatis, petalis duplè angustioribus, labelli calcare compresso truncato-conico intùs pubescente : laminâ lanceolatâ inflexâ dorso subcostatâ, capsulis oblongis hexagonis.

*Ansjei-maravara*. *Rheede* 12. *t.* 1.

*Epidendrum retusum*. *Linn. Sp. Pl.* 1351.

*Limodorum retusum*. *Swartz. Nov. Act. Ups.* 6. 80.

*Aerides retusum*. *Swartz. in Schrad. Diar.* 1799. *p.* 233. *Willd. Sp. Pl.* 4. 130.

*Aerides guttatum*. *Roxb. Mus.*

? *Rhyncostylis retusa*. *Blume Bijdr.* *p.* 286.

*Sarcanthus guttatus*. *Lindl. Bot. Reg.* *t.* 1443.

Hab. in *India Orientali*, *Malabar*, Rheede ; *Java*, Blume ; *Sylhet*, *Chittagong*, et *Nepalia*, Wallich (hab. s. sp. e Mus. Angl. Ind. et v. v. c.)

Species pulchrior omnibus. Folia pedalia. Flores albi roseo-violaceo guttati ; laminâ labelli unicolore.

5. *SACCOLABIUM* spicatum.

S. "foliis lineari-lingulatis recurvis apice truncatis cum mucronulo, spicis basilaribus elongatis multifloris, labello indiviso ovali margine undulato demum infernè cornuto, foliolis perianthii subrotundo-ovalibus : anticis maximis alæformibus, calcare saccato descendente." Don.

*Epidendrum* Hippium. *Hamilt. Mus.*

*Aerides* spicatum. *Don. Prodr. Nep.* 31.

Hab. in *Nepalia*, Hamilton.

6. *SACCOLABIUM* præmorsum.

S. foliis radicalibus linearibus canaliculatis apice præmorsis cuspidatis, racemis longissimis, labelli calcare infundibulari obtuso recurvo : laminâ ovatâ acutâ.

*Biti-marum-maravara*. *Rheede* 12. t. 2.

*Aerides* præmorsum. *Willd. Sp. Pl.* 4. 130.

*Rhyncostylis* præmorsa. *Blume Bijdr.* p. 286.

Hab. in insulis et continente *Indiæ Orientalis*, Rheede, Blume.

7. *SACCOLABIUM* ringens. *Lindl. in Wall. Cat. no.* 7313.

S. foliis . . . . ., racemo subramoso stricto crassiusculo multifloro, perianthio ringente, sepalis ovatis acutis, petalis paulò minoribus, labelli calcare infundibulari obtuso incurvo : laminâ trilobâ basi callosâ : lobis lateralibus nanis rotundatis intermedio ovato acuto.

Hab. in *India Orientali* prope Madras, *Wight* (hab. s. sp. comm. cel. *Wight*.)

Flores magnitudine S. guttati.

8. *SACCOLABIUM* giganteum. *Lindl. in Wall. Cat. no.* 7306.

S. foliis latis loratis carnosissimis apice uncinato-bilobis obliquis, racemis cylindraceis multifloris, sepalis oblongis obtusis, petalis angustioribus obovatis, labelli calcare conico laminâ breviori obovatâ carnosâ apice 3-lobâ : lobis rotundatis intermedio inflexo minore.

Hab. in *India Orientali*, prope Prome, *Wallich* (hab. s. sp. e Mus. Angl. Ind.)

Flores magnitudine S. guttati.

9. *SACCOLABIUM* Wightianum. *Lindl. in Wall. Cat. no.* 7303.

S. foliis canaliculatis angustis obtusis carnosissimis apice subæqualibus, racemis erectis ramosissimis foliis longioribus, sepalis petalisque ovatis obtusis, labelli calcare cylindraceo obtuso arcuato : laminâ lanceolatâ basi callo bilobo carnosissimo instructâ : lobis lateralibus rotundatis, capsulis tripteris et tricoctatis.

S. lineare. *Lindl. l. c. no.* 7312.

Hab. in *India Orientali*, *Heyne*, *Wight* (hab. s. sp. e Mus. Angl. Ind. et comm. amic. *Wight*.)

Exemplaria Heyneana florifera manca et nimis sub exsiccatione compressa haud veram partium structuram docent ; *Wightiana* fructifera floribus carent nisi vestigiis quibusdam corrugatis in apicem capsularum. Olim



diversas species putavi, nunc autem, re meliùs perpensâ, conjungo.—  
Racemi 6-8 poll. longi. Flores magnitudine *S. guttati*.

10. *SACCOLABIUM curvifolium*.

*S. foliis linearibus canaliculatis arcuatis apice obliquè præmorsis, racemis erectis densis multifloris, sepalis ovatis: lateralibus majoribus, petalis obovatis, labelli calcare cylindraceo obtuso laminâ lineari truncatâ.*

Hab. in *Napalia*, Wallich; *Zeylona*, Macrae. (hab. *s. sp. et v. ic. pict. in Bibl. Mus. Angl. Ind.*)

Folia angusta 8-9 unc. longa. Racemi breviores, 2½ unc. longi. Flores ruberrimi.

11. *SACCOLABIUM rubrum*. Lindl. in *Wall. Cat. no. 7310*.

*S. foliis canaliculatis arcuatis apice bidentatis, racemis erectis multifloris, sepalis petalisque ovatis, labelli calcare cylindraceo obtuso incurvo laminâ ovali acuminatâ apice subcarnosâ basi bicorniculatâ.*

*Saccolabium ampullaceum*. Lindl. in *Wall. Cat. no. 7307* vix distinguendum.

Hab. in *Napalia*, Moalmyne, ad ripas fluminis *Attran*, Wallich. (hab. *s. sp. e Mus. Angl. Ind. et v. ic. pict.*)

Species pulcherrima *S. curvifolio* simillima, sed structura labelli certè diversa; color ferè idem sed paulò magis roseus; an meræ varietates?

12. *SACCOLABIUM papillosum*. Lindl. in *Bot. Reg. t. 1552*.

*S. foliis ligulatis apice obliquis cuspidatis, racemis brevissimis capitatis, sepalis carnosiss linearis-ovatis obtusis, labelli calcare obconico obtuso intùs villosa laminâ ovatâ carnosâ papillosâ recurvâ.*

*Thalia maravara*. Rheede 12. t. 4.

*Cymbidium præmorsum*. Swartz. *Nov. Act. Ups. 6. 75*. Willd. *Sp. Pl. 4. 103*.

*Epidendrum præmorsum*. Roxb. *Corom. 1. 34. t. 43*.

*Aerides undulatum*. Smith. in *Rees. suppl.*

Hab. in *Malabaria*, Rheede; juxta *Prome*, Wallich. (hab. *s. sp. e Mus. Angl. Ind. et v. v. c.*)

Caulis arcuatus, subpedalis, distichè foliosus, radices tortuosas promens. Folia atroviridia, 4-6 poll. longa. Racemi parvi, foliis triplò breviores. Flores albi, luteo purpureoque picti.

13. *SACCOLABIUM dasypogon*.

*S. acaule, foliis ovato-oblongis acutis apice obliquè bidentatis, corymbis subumbellatis densifloris foliis æqualibus, sepalis petalisque lineari-oblongis incurvis, labelli laminâ dilatatâ subcordatâ denticulatâ.*

*Epidendrum umbellatum*. Hamilt. *Mss.*

*Aerides dasypogon*. Smith. in *Rees. suppl.*

Hab. in *Napalia*, Hamilton. (v. *ic. pict. penes Dom. Bauer.*)

Sepala et petala extùs viridia, intùs sanguinea. Labellum album, punctis luteis sanguineisque maculatum.

14. *SACCOLABIUM undulatum*. Lindl. in *Wall. Cat. no. 7301*.

*S. acaule, foliis angustè loratis undulatis acuminatis apice obliquis obtusis, racemis brevibus multifloris, sepalis ovato-oblongis acutis, petalis duplò angustioribus, labelli calcare oblongo apice subinflato: laminâ oblongâ obtusâ levissimè trilobâ.*

Hab. in *Sylhet*, Wallich. (hab. *s. sp. e Mus. Angl. Ind.*)

Flores parvi.

15. *SACCOLABIUM acutifolium*.

S. foliis oblongo-loratis carnosis acutis apice integerrimis, corymbis multifloris. sepalis petalisque obovato-oblongis acutiusculis, labelli calcare brevi ventricoso: laminâ dilatâ trilobâ denticulatâ: lobis lateralibus intermedio majoribus.

*Aerides umbellatum. Wallich. Ic. 1137.*

Hab. in *India Orientali, Wallich. (v. ic. pict. in bibl. Angl. Ind.)*

Folia ex icone rigida, disticha, 6-8 p. longa. Flores lutei, unicolores; labello albo, medio rubescente.

16. *SACCOLABIUM calceolare. Lindl. in Wall. Cat. no. 7302.*

S. subacaule, foliis loratis acuminatis apice obliquè bidentatis, corymbis multifloris breviter pedunculatis, sepalis petalisque obovato-oblongis obtusis, labelli calcare inflato orbiculato: laminâ lunatâ rotundatâ ciliatâ.

*Gastrochilus calceolaria. Don. Prodr. Nep. 32.*

*Aerides calceolare. Smith. in Rees. suppl.*

Hab. in *Napalia et Sylhet, Wallich. (hab. s. sp. e Mus. Angl. Ind. et v. ic. pict.)*

Folia 9 p. longa, basi maculata. Sepala et petala flava, maculis subrotundis purpureis notata. Labellum album; laminâ basi luteo et coccineo punctatâ.

17. ? *SACCOLABIUM clavatum*.

S. "caulescens, pendulum, foliis lineari-clavatis apice bidentatis, spicis oppositifoliis, labello inflato barbato." *W.*

*Epidendrum clavatum. Retz. Obs. 6. p. 50.*

*Limodorum clavatum. Willd. Sp. Pl. 4. 126.*

Hab. in arboribus *Indiæ Orientalis*.

18. *SACCOLABIUM obliquum. Lindl. in Wall. Cat. no. 7304.*

S. acaule, foliis latè loratis apice obtusis bilobis valdè obliquis, corymbis brevibus axillaribus multifloris breviter pedunculatis, sepalis petalisque lineari-obovatis obtusis, labelli calcare inflato orbiculato: laminâ deltoideâ fimbriatâ.

Hab. in *India Orientali, supra montem Toong Dong, Wallich. (hab. s. sp. e Mus. Angl. Ind. et v. ic. pict.)*

Folia glauco-viridia, undulata, 6-10 poll. longa, ferè 2 poll. lata. Flores lutei, labello albo; maculæ quædam minutæ roseæ adsunt ad basin perianthii et marginem labelli.

19. *SACCOLABIUM ascendens*.

S. caule ramoso repente, foliis coriaceis planis basi vaginantibus, racemis lateralibus elongatis, sepalis petalisque conniventibus subæqualibus, labelli calcare clavato: laminâ trilobâ parvâ: laciniis lateralibus inflexis.

*Robiquetia ascendens. Gaudich. Voy. 426. t. 34.*

Hab. in insulis *Moluccis* ad arborum truncos, Gaudichaud.

20. *SACCOLABIUM aphyllum*.

S. aphyllum, caulibus tortuosis squamosis scandens, radicibus longissimis tortuosis, racemis brevibus erectis multifloris, sepalis petalisque ovalibus, labelli calcare infundibulari apice inflato obtuso: laminâ ovatâ acutâ.

May, 1833.

cg

*Angræcum aphyllum.* *Thouars. Orch. Afr. t. 73.*

*Gussonea aphylla.* *Ach. Rich. Orch. Maur. p. 76. t. 11.*

Hab. in insulis *Mauritio, Borbonia, et Madagascaria*, Thouars.

Flores minuti, rubescentes.

21. *SACCOLABIUM striatum.*

S. foliis loratis apice obliquè bilobis, racemis erectis rarifloris foliis brevioribus, sepalis petalisque ovatis acutis, labelli calcare conico obtuso in laminâ ovatâ acutâ producto.

*Angræcum striatum.* *Thouars. Orch. Afr. t. 72.*

Hab. in *Borbonia*, Thouars.

Flores mediocres, albi.

22. *SACCOLABIUM coriaceum.*

S. "foliis caulinis ovatis acuminatis subcoriaceis lineatis, spicis paniculatis." *Sw.*

*Aerides coriaceum.* *Swartz. in Schrad. Diar. Bot. 1799. 234. Willd. Sp. Pl. 4. 131.*

Hab. in *Madagascar*, Swartz.

23. *SACCOLABIUM ramosum.*

S. foliis angustis planis arcuatis apice obliquè præmorsis erosis, racemis ramosissimis erectis foliis longioribus: ramis divaricatis, sepalis obovato-oblongis obtusis, petalis obovatis angustioribus, labelli calcare conico subarcuato obtuso margine dentato: laminâ oblongâ rotundatâ lobis 2 lateralibus obsoletis.

*Aerides ramosum.* *Wall. Ic. no. 654.*

Hab. supra arbores *Deltæ Gangeticæ*, Wallich. (v. ic. pict. in bibl. *Angl. Ind.*)

Folia 6 uncias longa, semunc. lata. Flores parvi; petala et sepala pallidè lateritia margine lutescentia; labellum album roseo tinctum.

24. *SACCOLABIUM racemiferum.*

S. foliis loratis planis apice obliquè emarginatis obtusis, racemis ramosis foliis brevioribus, sepalis ovatis, petalis linearibus, labelli calcare conico obtuso compressiusculo: margine anteriore loco laminæ acuto denticulo subulato utrinque instructo.

*Aerides racemiferum.* *Wallich. Ic. no. 655.*

Hab. in *India Orientali*, Wallich. (v. ic. pict. in bibl. *Angl. Ind.*)

Folia pedalia et ultra. Flores parvi. Perianthium intus fusco-rubrum, laciniis per axin et margine lutescentibus. Labellum albidum, verosimiliter carnosum. *S. densifloro* affine.

25. *SACCOLABIUM niveum.*

S. foliis distichis lineari-loratis rectis apice obtusis emarginatis subæqualibus, pedunculis ancipitibus ramosis foliis multò longioribus, floribus spicatis, sepalis conniventibus dorsali lateralibus duplò minore, labelli calcare cylindraceo obtuso laminæ spatulatæ carnosæ æquali.

Hab. in *Zeylona*, supra saxa in collibus altis ad *Peradeniam*, *Macrae.* (hab. s. sp. et v. ic. pict.)

Folia 2½ p. longa, 3 l. lata, exsiccatione recurva. Spicæ ramosæ, 6-8 p. longæ. Flores minuti, albi, basi virescentes. Petala sepalo dorsali majora, lateralibus minora.

OMA spatulata. *Blume l. c.*

linearibus obliquè retusis, spicis simplicibus, labelli dentibus abbreviatis obtusis, limbo spatulato."

in montanis Pantjar provinciæ Buitenzorg, Blume.

OMA callosa. *Blume l. c.*

linearibus obliquè retusis, spicis simplicibus, labelli dentibus rotundatis internè callosis, limbo ovato brevissimo."

in montanis Pantjar, provinciæ Buitenzorg, Blume.

OMA maculosa.

is, foliis loratis distichis apice bilobis obliquis obtusis, spicis abramosis, sepalis petalisque obovato-oblongis patentibus æquali calcare poculiformi : dente dorsali ovato, laminâ brevissimâ

*Zeylona*, supra arbores, *Macrae*. (*hab. s. sp. et v. ic. pict.*)

p. longa, plana, carnosa. Flores minores, extûs rosei, intûs maculis fuscis confluentibus maculosi. Labellum album.

OSTOMA acaulis.

is, foliis loratis apice obliquè et acutè bilobis, corymbis brevipedatis paucifloris, sepalis petalisque subrotundo-oblongis carnosissimis, labello saccato cymbiformi acuto carnosissimo.

*Zeylona*, supra arbores in locis montosis, *Macrae*. (*hab. s. sp. et v. ic.*)

3-4 p. longa. Flores parvi. Sepala et petala lutescentia apice escentia, maculis parvis sanguineis notata. Labellum album medium, cum basi columnæ continuum, basi intûs dente valido solitario etum.

**LIMODORUM complanatum** (caulescens simplex pendulum, foliis retusis convexis subthâs carinatis, spicâ oppositifoliâ compressâ, labello retuso). *Willd. Sp. Pl.* 4. 126.

idendum complanatum. *Retz. Obs.* 6. 50.

ab. in arboribus *Indiæ Orientalis*.

## CXLVII. APPENDICULA.

Appendicula. *Blume Bijdr.* 297. *tabellen* 40.

Perianthium clausum. Sepala basi subconnata; lateralibus ungui longè producto columnæ obliquè adnatis, calcar obtusum æmulantibus; dorsali subfornicato. Petala minora. Labellum liberum, concavum, indivisum, basi appendiculatum, v. margine elevato cinctum, ungui columnæ longè producto affixum. Columna nana. Anthera dorsalis, 2-locularis: loculis sub-4-locellatis. Pollinia 8, nunc abortu pauciora, clavata, basi attenuata, glandulâ longâ, caudiculâ verâ nullâ.—Epiphytæ, simplices, v. ramosæ, teretiusculæ, rariûs foliosæ. Folia disticha, plerumque membranacea. Pedunculi spicato-multiflori, rariûs solitarii.

haracter ex Blume.

inappendiculato. Columna nana, erecta, rostello ovato. Anthera semi-bivalvis. Pollinia 4, caudiculâ capillari, glandulâ minutissimâ. — Herbæ pusillæ, epiphytæ, acaules. Folia fasciculata, linearia, plana, fasciolata. Flores spicati, bracteolati, minutissimi.

Character ex Blume.

1. *TÆNIOPHYLLUM glandulosum*. Blume l. c.

T. "spicâ elongatâ retroflexâ glandulis adpersâ laxiflorâ, labelli limbo acuminato intûs ad apicem denticulo instructo."

Hab. in *Java*, sylvis altioribus montium Gede et Pangurangu, Blume.

2. *TÆNIOPHYLLUM hirtum*. Blume l. c.

T. "spicâ elongatâ leviter flexuosâ laxiflorâ hirtâ, labelli limbo acuminato intûs edentulo, rostello anticè valde producto."

Hab. in *Java*, in arboribus ad montem Gegar Bentang, Blume.

3. *TÆNIOPHYLLUM acuminatissimum*. Blume l. c.

T. "spicâ abbreviatâ retroflexâ glabrâ pauciflorâ, bracteis approximatis, sepalis et labello acuminatissimis margine inflexis."

Hab. in *Java*, montosis Pantjar provinciæ Buitenzorg, Blume.

4. *TÆNIOPHYLLUM obtusum*. Blume l. c.

T. "spicis abbreviatis strictis scabris, bracteis bifariam imbricatis, labelli limbo obtuso."

Hab. in *Java*, ad montem Burangrang provinciæ Krawang, Blume.

#### CXLVI. CLEISOSTOMA.

*Cleisostoma*. Blume Bijdr. 362. tabellen 27.

Sepala et petala patentia, linearia, subæqualia, anterioribus labello superpositis. Labellum calcaratum, cum basi columnæ accretum; calcare dente clauso; limbo tridentato. Columna erecta, semiteres. Anthera semibilocularis. Pollinia 2, biloba, subglobosa, caudiculâ filiformi, glandulâ minutâ hamatâ. — Herbæ epiphytæ, caulescentes. Caules radicales. Folia disticha, rigida, subcarnosa. Spicæ oppositifoliæ, subramosæ.

Character ex Blume.

1. *CLEISOSTOMA suaveolens*. Blume l. c.

C. "foliis lato-linearibus obliquè retusis, labelli limbo fornicato cum mucrone fimbriato."

Hab. in *Java*, sylvis Nusæ Kambangæ insulæ, Blume.

2. *CLEISOSTOMA subulata*. Blume l. c.

C. "foliis lineari-lanceolatis apice contracto-subulatis, labelli limbo ovato acuto margine utrinque tumido."

Hab. in *Java*, prope Tjilele in montanis Parang provinciæ Tjanjor, Blume.

3. *CLEISOSTOMA sagittata*. Blume l. c. t. 27.

C. "foliis linearibus retusis, labelli limbo recto sagittato."

Hab. in *Java*, in montanis Pantjar, provinciæ Buitenzorg, Blume.

Variat, floribus minoribus, foliis angustioribus.

4. *CLEISOSTOMA spatulata*. Blume l. c.

C. "foliis lato-linearibus obliquè retusis, spicis simplicibus, labelli dentibus lateralibus abbreviatis obtusis, limbo spatulato."

Hab. in *Java*, in montanis Pantjar provinciæ Buitenzorg, Blume.

5. *CLEISOSTOMA callosa*. Blume l. c.

C. "foliis linearibus obliquè retusis, spicis simplicibus, labelli dentibus lateralibus rotundatis internè callosis, limbo ovato brevissimo."

Hab. in *Java*, in montanis Pantjar, provinciæ Buitenzorg, Blume.

6. *CLEISOSTOMA maculosa*.

C. caulescens, foliis loratis distichis apice bilobis obliquis obtusis, spicis erectis subramosis, sepalis petalisque obovato-oblongis patentibus æqualibus, labelli calcare poculiformi : dente dorsali ovato, lamina brevissimâ rotundatâ.

Hab. in *Zeylona*, supra arbores, *Macrae*. (*hab. s. sp. et v. ic. pict.*)

Folia 6-8 p. longa, plana, carnosa. Flores minores, extus rosei, intus lutei maculis fuscis confluentibus maculosi. Labellum album.

7. *CLEISOSTOMA acaulis*.

C. acaulis, foliis loratis apice obliquè et acutè bilobis, corymbis brevipedunculatis paucifloris, sepalis petalisque subrotundo-oblongis carnosissimis, labello saccato cymbiformi acuto carnosissimo.

Hab. in *Zeylona*, supra arbores in locis montosis, *Macrae*. (*hab. s. sp. et v. ic. pict.*)

Folia 3-4 p. longa. Flores parvi. Sepala et petala lutescentia apice virescentia, maculis parvis sanguineis notata. Labellum album medio flavum, cum basi columnæ continuum, basi intus dente valido solitario auctum.

? 8. *LIMODORUM complanatum* (caulescens simplex pendulum, foliis retusis convexis subtus carinatis, spicâ oppositifoliâ compressâ, labello retuso). *Willd. Sp. Pl.* 4. 126.

*Epidendrum complanatum*. *Retz. Obs.* 6. 50.

Hab. in arboribus *Indiæ Orientalis*.

## CXLVII. APPENDICULA.

Appendicula. *Blume Bijdr.* 297. tabellen 40.

Perianthium clausum. Sepala basi subconnata; lateralibus ungui longè producto columnæ obliquè adnatis, calcar obtusum æmulantibus; dorsali subfornicato. Petala minora. Labellum liberum, concavum, indivisum, basi appendiculatum, v. margine elevato cinctum, ungui columnæ longè producto affixum. Columna nana. Anthera dorsalis, 2-locularis: loculis sub-4-locellatis. Pollinia 8, nunc abortu pauciora, clavata, basi attenuata, glandulâ longâ, caudiculâ verâ nullâ.—Epiphytæ, simplices, v. ramosæ, teretiusculæ, rariùs foliosæ. Folia disticha, plerumque membranacea. Pedunculi spicato-multiflori, rariùs solitarii.

Character ex Blume.

§ I. *Flores in spicis elongatis. Labellum sepalis lateralibus rard connatum, integrum.*

1. APPENDICULA pendula. *Blume l. c.*

A. "caulibus simplicibus superne compressiusculis, foliis lineari-lanceolatis apice tricuspidatis, spicis axillaribus lateralibus terminalibusve solitariis confertisve pendulis folio longioribus, labelli limbo ovato obtuso cum mucrone."

Hab. in *Java*, in montanis provinciarum Buitenzorg, Bantam et Tjanjor, Blume.

Bracteæ ovales, obtusæ, concavæ reflexæ.

2. APPENDICULA cristata. *Blume l. c.*

A. "caulibus ramosis compressis, foliis lineari-lanceolatis apice tricuspidatis, spicis oppositifoliis axillaribus terminalibusve solitariis longissimis subramosis inferne nudis compressis, labelli limbo rotundato emarginato interne utrinque cristato."

Hab. in *Java*, in montanis Pantjar, Blume.

3. APPENDICULA anceps. *Blume l. c.*

A. "caulibus simplicibus foliaceis, foliis lanceolatis apice tricuspidatis, spicis oppositifoliis terminalibusve solitariis geminisve folio brevioribus, labelli limbo obtusiusculo reflexo."

Hab. in *Java*, in montibus provinciarum occidentaliun Javæ insulæ, Blume. Sepala lateralia exteriora ungui labelli inferne adhærentia.

4. APPENDICULA alba. *Blume l. c.*

A. "caulibus simplicibus compressiusculis, foliis lineari-lanceolatis retuso-mucronatis, spicis axillaribus simplicibus terminalibusve sæpè geminatis folio brevioribus, labelli limbo obtuso."

Hab. in *Java*, locis umbrosis ad montem Salak, Blume.

Flores albi mediocres.

5. APPENDICULA ramosa. *Blume l. c.*

A. "caulibus ramosis teretiusculis, foliis ovali-oblongis (parvis) retuso-mucronatis, spicis paucifloris oppositifoliis terminalibusve solitariis folio subæqualibus labelli limbo obtuso interne bicalloso."

Hab. in *Java*, ad marginem fluvii Tjapus in montosis Salak, Blume.

6. APPENDICULA pauciflora. *Blume l. c.*

A. "caulibus simplicibus teretibus, foliis ovalibus (parvis) retuso-mucronatis, pedunculis oppositifoliis brevissimis subunifloris, labelli limbo obtuso cum mucrone."

Hab. in *Java*, in sylvis altioribus montis ignivomi Gede, Blume.

7. APPENDICULA buxifolia. *Blume l. c.*

A. "caulibus ramosis teretibus, foliis linearibus (parvis) obliquè mucronulato-retusis rigidis lucidis, spicis axillaribus terminalibusve solitariis folio brevioribus paucifloris, labelli limbo rotundato crenulato intus ad marginem tumido."

Hab. in *Java*, supra montem Pantjar, &c. Blume.

Flores parvi, flavescentes.

8. APPENDICULA carnosa. *Blume l. c.*

- A. "caulibus simplicibus teretibus, foliis linearibus apice inæquali-obtusis carnosis, pedunculis axillaribus v. intrafoliaceis brevissimis 1-2-floris, labelli limbo rotundato emarginato recto."

Hab. in *Java*, sylvis altioribus montis Salak, Blume.

Flores parvi, albido-virescentes; sepala lateraliter exteriora calcar obtusum referentia, ungui labelli adglutinata.

9. APPENDICULA angustifolia. *Blume l. c.*

- A. "caulibus simplicibus teretibus, foliis linearibus obliquè retusis canaliculatis rigidiusculis, spicis axillaribus solitariis folio brevioribus, limbi acuti marginibus incurvis."

Hab. in *Java*, sylvis altioribus Salak, Blume.

10. APPENDICULA reflexa. *Blume l. c.*

- A. "caulibus simplicibus teretibus, foliis ovalibus retuso-mucronulatis, spicis supra-axillaribus solitariis folio brevioribus densifloris, labelli limbo patente obtuso cum mucrone."

Hab. in *Java*, in arbores ad ripas fluvii Tjapus et in humidis montis Pantjar, Blume.

Flores minuti, albidi; labellum inferne sepalis lateralibus exterioribus adhærens.

11. APPENDICULA undulata. *Blume l. c.*

- A. "caulibus simplicibus compressis, foliis ovalibus retuso-mucronulatis, spicis oppositifoliis solitariis folio æqualibus, labelli limbo ovato undulato."

Hab. in *Java*, in sylvis Pantjar, Blume.

Labellum inferne sepalis exterioribus junctum, intus appendiculo ligulato emarginato instructum.

12. APPENDICULA purpurascens. *Blume l. c.*

- A. "caulibus simplicibus compressis, foliis ovalibus retuso-mucronatis, spicis filiformibus subramosis oppositifoliis terminalibusve folio multo longioribus, labelli limbo ovato acutiusculo."

Hab. in *Java*, sylvis montium Salak et Gede, Blume.

13. APPENDICULA cornuta. *Blume l. c.*

- A. "caulibus simplicibus teretibus, foliis ovalibus retuso-mucronulatis, spicis terminalibus oppositifoliisve solitariis folio brevioribus paucifloris, labelli limbo obtuso intus calloso, gynostemio utroque latere dente recurvo instructo."

Hab. in *Java*, in sylvis montium Seribu et Pantjar, Blume.

Flores albi mediocres.

14. APPENDICULA congenera. *Blume l. c.*

- A. "caulibus foliis et spicis præcedentis sed labello reflexo rotundato concavo intus nudo, gynostemio edentulo."

Hab. in *Java*, supra montem Pantjar, Blume.

Flores magnitudine præcedentis.



15. APPENDICULA torta. *Blume l. c.*

A. "caulibus simplicibus compressis, foliis ovalibus retuso-macronulatis, spicis terminalibus solitariis bracteis coloratis (roseis) bifariam imbricatis, labello torto."

Hab. in *Java*, montanis Seribu et Pantjar, Blume.

§ II. *Flores terminales, capitati, bracteis paleaceis cincti. Labellum sepalis lateralibus exterioribus plerumque infernè adnatum, sublobatum.*

16. APPENDICULA callosa. *Blume l. c.*

A. "caulibus simplicibus teretiusculis, foliis lineari-ovalibus retuso-mucronulatis, vaginis foliorum bidentatis, labelli limbo lato-ovato internè calloso patente."

Hab. in *Java*, montanis provinciarum Bantam et Buitenzorg, Blume.

17. APPENDICULA Hasseltii. *Blume l. c.*

A. "caulibus simplicibus teretibus, foliis lato-linearibus retuso-mucronulatis, vaginis foliorum edentulis, labelli limbo erectiusculo crenulato."

Hab. in *Java*, calcareis provinciarum Bantam et Buitenzorg, Blume.

18. APPENDICULA longifolia. *Blume l. c.*

A. "caulibus simplicibus compressis, foliis lineari-lanceolatis retusis, floribus densè capitatis."

Hab. in *Java*, sylvis altioribus montium Salak, Pangurang, &c. Blume.

## CXLVIII. CRYPTOGLOTTIS.

*Cryptoglottis. Blume Bijdr. 296. tabellen 42.*

Perianthium clausum. Sepala basi connata; lateralibus cum ungue columnæ in calcar longum basi didymum productis, supra medium inter se connatis. Labellum inclusum, unguiculatum, integerrimum, cum pede columnæ elasticè articulatum. Columna nana, in ovarium recumbens, rostello subulato erecto. Anthera ferè dorsalis, 2-locularis. Pollinia 4, clavata, inæqualia, sterilibus quibusdam intermixtis, caudiculâ tenui brevi, glandulâ hamatâ. — Herba epiphyta, pusilla, subramosa. Folia linearia, cuspidata. Pedunculi terminales, subsolitarii, pauciflori. Flores bracteolati, parvi, albid.

Character ex Blume.

1. CRYPTOGLOTTIS serpyllifolia. *Blume l. c.*

Hab. in *Java*, in arbores montium Seribu, Blume.

## CXLIX. CERATOSTYLIS.

*Ceratostylis. Blume Bijdr. 304. tabellen 56.*

Perianthium clausum. Sepala basi connata; lateralibus basi productis calcar breve obtusum æmulantibus. Petala sepalis supremo subæqualia. Labellum subinclusum; ungue longo incurvo; limbo indiviso, concavo, crasso. Columna brevis, basi longè producta, libera. Anthera 2-locu-

laris ; loculis 4-partitis. Pollinia 8, in glandulam sessilia.—Epiphytæ, subcaulescentes, ebulbæ. Pedunculi 1-flori, ad basin foliorum positi, paleis cincti.

Character ex Blume.

1. CERATOSTYLIS graminea. *Blume l. c.*

C. "caulescens, foliis lineari-lanceolatis acuminatissimis, pedunculis solitariis geminisve subtomentosis, labello apice incrassato margine ciliato."

Hab. in *Java*, ad montem Salak, Blume.

2. CERATOSTYLIS latifolia. *Blume l. c.*

C. "caulescens, foliis lanceolatis obtusis, pedunculis solitariis geminisve villosiusculis, labello intus lineis duabus pubescentibus notato."

Hab. in *Java*, in cacumen montis Gede, Blume.

3. CERATOSTYLIS simplex. *Blume l. c.*

C. "caulibus simplicibus teretibus 1-phyllis, foliis lanceolatis retusis, pedunculis solitariis sepalisque glabris, labello superne cucullato."

Hab. in *Java*, in vicinitate cataractarum fluvii Tji-Kundul in montanis Gede, Blume.

4. CERATOSTYLIS anceps. *Blume l. c.*

C. "caulibus simplicibus subfoliaceis 1-phyllis, foliis lanceolatis retusis, pedunculis 1-3 sepalisque exterioribus arachnoideo-pubescentibus."

Hab. in *Java*, in vicinitate cataractarum fluvii Tji-Kundul in montanis Gede, Blume.

5. CERATOSTYLIS gracilis. *Blume l. c.*

C. "caulibus simplicibus teretibus 1-phyllis, foliis lineari-subulatis semiteretibus, pedunculis 1-4 ovariisque villosiusculis."

Hab. in *Java*, in montanis Seribu et Pantjar, Blume.

6. CERATOSTYLIS subulata. *Blume l. c.*

C. "caulibus simplicibus teretibus 1-phyllis, foliis subulatis teretibus leviter canaliculatis, floribus confertis arachnoideo-pubescentibus."

Hab. in *Java*, in montanis Salak, Pantjar, &c. Blume.

Flores minimi, flavescentes ; sepala lateralibus exterioribus in calcare didymo coalita.

## CLI. EPHIPPIUM.

*Ehippium* § 2. *Blume Bijdr.* 308. *tabellen* 65.

Perianthium subringens, sepalis lateralibus latioribus cum ungue productâ columnæ connatis. Labellum parvum, sellæforme, integrum, cum basi productâ columnæ elasticè articulatam. Columna in ovarium recumbens, nana, anticè bicornuta. Anthera 2-locularis. Pollinia 2, bipartibilia, caudiculâ (ex icone) clavatâ.—Herbæ epiphytæ. Caules radiciformes. Folia solitaria, plerumque pseudobulbo insidentia, coriacea. Pedunculi ad basin pseudobulborum orti, basi vaginati, apice pauci-aut multi-flori. Flores subpedicellati, bracteati, purpurascens.

May, 1833.

■ h

Character ex Blume. *Bolbophyllo* valdè simile videtur, sed glandulâ maximâ differt. An rectè descriptum? Plures species, *Cirrhopetalò* fortè referendæ, sed olim omissæ, in supplemento nostro mox describentur.

1. *EPHIPPIUM* lepidum. *Blume l. c.*

E. "bulbis ovatis pentagonis, foliis lanceolatis obtusis emarginatis, floribus in pedunculo elongato ad apicem capitatis, sepalis lateralibus exterioribus cohærentibus reliquis valdè majoribus, dorsali interioribusque ciliolatis acuminatissimis."

Hab. in *Java*, in montanis Pantjar, supra arbores, Blume.

2. *EPHIPPIUM* cornutum. *Blume l. c. c. ic.*

E. "bulbis ovato-oblongis subtetragonis, foliis lanceolatis acutis, pedunculo brevi 1-floro, sepalis acutis, lateralibus exterioribus reliquis valdè latioribus, labello ad marginem internè ciliato."

Hab. in *Java*, in sylvis elatis montis Salak, Blume.

### CLI. CERATOCHILUS.

*Ceratochilus*. *Blume Bijdr.* 358. tabellen 25 (1825).—*Omæa*. *Id.* 359.

Perianthium patens. Sepala 2 lateralia labello supposita. Petala angustiora. Labellum parvum, sacco v. calcare compresso; cum columnâ connatum, fauce biglandulosum, limbo trifido integro. Columna nana. Anthera bilocularis. Pollinia 2, globosa, biloba, caudiculâ filiformi, glandulâ hamatâ.—Herbæ pusillæ, epiphytæ. Caules simplices, v. subramosi. Folia disticha, crassa, linearia, subtriquetra. Flores pedunculati, solitarii.

Character ex Blume.

1. *CERATOCHILUS* biglandulosus. *Blume l. c.*

C. labelli calcare ventricosus laminâ subulatâ, caulibus simplicibus.

Hab. in *Java*, in sylvis elatioribus montium Gede, Salak, &c. Blume.

2. *CERATOCHILUS* micranthus.

C. labelli calcare compresso emarginato: laminæ trifidæ laciniâ medio erectâ incrassatâ, caulibus subramosis flexuosis.

*Omæa micrantha*. *Blume Bijdr.* 359.

Hab. in *Java*, in sylvis altioribus montis Salak, Blume.

Flores minuti, flavescentes.

3. ? *CERATOCHILUS* orchideus.

C. "caulescens simplex articulatus pendulus flexuosus, foliis distichis lanceolatis acutis, floribus axillaribus subsolitariis, labello bifido, cornu germine duplò brevior." *W.*

*Epidendrum Orchideum*. *Retz. Obs.* 6. 48.

*Limodorum Orchideum*. *Willd. Sp. Pl.* 4. 126.

Hab. in arboribus *Indiæ Orientalis*.

## CLII. ECHIOGLOSSUM.

*Echioglossum. Blume Bijdr. 364. tabellen 28.*

Perianthium explanatum, patens. Sepala et petala subæqualia. Labellum cornutum, trilobum; lobis lateralibus erectis, intermedio difformi utrinque calloso, in ligulam bifidam patentem producto; cornu dente clausum. Columna semiteres, aptera. Anthera bilocularis. Pollinia 2, bipartibilia, caudiculâ filiformi medio auriculatâ, glandulâ arcuatâ dilatatâ.—Herba epiphyta, caulescens. Folia disticha, lineari-lanceolata, cuspidata, rigida. Spica oppositifolia pubescens.

Character ex Blume.

1. *ECHIOGLOSSUM Javanicum. Blume l. c.*

Hab. in *Java*, ad truncos arborum in monte Salak, Blume.

## CLIII. SARCANTHUS.

*Sarcanthus. Lindl. Coll. Bot. t. 39 B (1826.)*

Perianthium explanatum. Sepala et petala subæqualia. Labellum breve calcaratum, trilobum, carnosum, cum columnâ articulatam; calcare intus ½biloculari. Columna erecta, semiteres. Anthera bilocularis. Pollinia 2, posticè lobata, caudiculâ glandulâque variis.—Herbæ epiphytæ caulescentes. Folia disticha, plana v. teretia. Racemi oppositifolii. Flores speciosi.

1. *SARCANTHUS paniculatus. Illustr. of Orchideous Plants, t. 9. Genera.*

S. foliis longis loratis apice obliquè bilobis obtusis, spicis paniculatis, sepalis petalisque lineari-oblongis undulatis obtusiusculis, labelli calcare recto obtuso subemarginato in lamina bicorni medio callosa producto.

*Acerides paniculatum. Ker. in Bot. Reg. t. 220.*

*Vanda paniculata. R. Br. in Bot. Reg. fol. 506.*

Hab. in *China*.

Flores lutescentes, sepalis petalisque medio sanguineo bivittatis. Labellum luteum, laminæ cornubus albis, callo virescente.

2. *SARCANTHUS rostratus. Lindl. Coll. Bot. t. 39 B.*

S. foliis lanceolatis acutis planis subrecurvis, spicâ simplici horizontali foliis subæquali, sepalis petalisque obovato-oblongis obtusis patentibus, labelli calcare recto obtuso in lamina incurva rostrata producto.

Hab. in *China*, (v. v. c.)

Sepala et petala luteo-viridia sanguineo marginata. Labellum violaceum. Rostellum rostratum.

3. *SARCANTHUS succisus. Lindl. in Bot. Reg. t. 1014.*

S. foliis oblongis subundulatis præmorsis, spicâ simplici horizontali v. deflexâ foliis longiore, rachi ancipite, sepalis petalisque oblongis obtusis, labelli calcare apice didymo inflato in lamina ovata acuta carnosa producto.

Hab. in *China*. (v. v. c.)

Sepala et petala viridi-lutea medio purpurea. Labellum luteum, apice sanguineum.

4. *SARCANTHUS teretifolius*.

8. foliis teretibus, spicâ simplici horizontali foliis æquali, sepalis petalisque oblongis obtusis reflexis, labelli calcare recto obtuso intus pubescente in lamina ovata acuta carnosâ producto, facie columnæ villosâ.

*Vanda teretifolia*. *Lindl. Coll. Bot. t. 6.*

Hab. in *China*. (v. v. c.)

Sepala et petala luteo-viridia, venis tribus sanguineis notata. Labellum album, margine faucis violaceo. Rostellum truncatum.

#### CLIV. PODOCHILUS.

*Podochilus*. *Blume Bijdr. 295. tabellen 12.*—*Platysma*. *Id. 295. tabellen 43.*—*Apista*. *Id. 296.*

*Perianthium clausum*. Sepala basi connata; lateralibus latioribus cum v. sub ungue producto columnæ connatis. Petala angustiora, libera. Labellum cum pede columnæ elasticè articulatam, integrum, unguiculatum. Columna in ovarium recumbens, clinandrio bicorni membranaceo. Anthera ferè dorsalis, 2-locularis. Pollinia 4, caudiculis duabus, membranaceis, convolutis.—Herbæ epiphytæ, caulescentes. Folia disticha, parva. Flores parvi, solitarii v. spicati, sæpiùs terminales.

1. *PODOCHILUS* *lucescens*. *Blume l. c. t. 12.*

P. foliis ovalibus emarginatis rigidis lucidis, petalis obtusis, labello sagittato basi bicalloso, rostello subulato, glandulâ sagittatâ.

Hab. in *Java*, in arbores montium Salak, Pantjar, Meggamedung, &c. *Blume*.

2. *PODOCHILUS* *microphyllus*. *Lindl. in Wall. Cat. no. 7335.*

P. foliis angustè ovatis acutis obliquè tortis, petalis obtusis, labello sagittato emarginato, rostello obtuso, glandulâ subrotundâ.

Hab. in *Penang* et *Sylhet*, *Wallich*. (hab. s. sp. e *Mus. Angl. Ind.*)

Omnes partes florum minutissimæ. Petala obovata, obtusa, sepalis minora. Columnæ cornua membranacea, truncata. Stigma subrotundum, margine membranaceo anticè truncato circumdatum.

3. *PODOCHILUS* *cultratus*. *Lindl. in Wall. Cat. no. 7336.*

P. foliis equitantibus imbricatis acutis cultratis, spicis brevissimis paucifloris.

Hab. in *Napalia* inferiore ad Hetounda, *Wallich*. (hab. s. sp. defl. e *Mus. Angl. Ind.*)

Florum fabrica vix nota; eadem videtur ac in præcedente.

4. *PODOCHILUS* *falcatus*.

P. foliis equitantibus imbricatis obtusis falcatis, spicis laxis terminalibus nutantibus, petalis subulatis, labello lanceolato integerrimo in ungue sigmoideo angustato.

Hab. in *Zeylona*, supra saxa in montem Nuera Ellia, *Macrae*. (hab. s. sp.)

5. *PODOCHILUS saxatilis*.

P. foliis equitantibus retrorsum cultratis obtusis, spicis brevibus cernuis, petalis obtusiusculis, labello lanceolato integerrimo in ungue sigmoideo angustato.

Hab. in *Zeylona*, supra saxa in colles altiores ad Peradeniam, *Macrae*. (*hab. s. sp. et v. ic. pict.*)

Caules 2-3 poll. alti, carnosì, atrovirides. Folia parva, magis quam in cæteris speciebus carnosa. Flores parvi, flavi; labello in medio sanguineo.

6. *PODOCHILUS gracilis*.

P. foliis linearibus distichis cuspidatis, caulibus repentibus, floribus solitariis sessilibus, petalis obtusiusculis, labello sagittato obovato mucronato, capsulâ glandulosâ.

*Platysma gracile*. *Blume Bijdr.* 295, t. 42.

Hab. in *Java*, in montanis Pantjar et Seribu, *Blume*.

7. *PODOCHILUS tenuis*.

P. foliis distichis linearibus acuminatis, caule ramoso, spicis subterminalibus paucifloris, floribus minutissimis bracteolatis.

*Apista tenuis*. *Blume Bijdr.* 296.

Hab. in *Java*, in sylvis altioribus montium provinciarum Buitenzorg et Bantam, *Blume*.

Omnia *Podochili* (*luculentis*), sed columnâ latâ, utrinque emarginatâ, loculis antheræ disjunctis massisque pollinis per paria pharetratis, emarginaturis columnæ utrinque pedicellis respondentibus. *Blume*.

## CLV. ADENONCOS.

*Adenoncos*. *Blume Bijdr.* 381.

Sepala et petala erecta, subæqualia. Labellum concavum, carnosum, intus glanduloso-tumidum, erectum: limbo indiviso. Columna brevis, obtusa. Anthera semibilocularis. Pollinia 4, (an 2, bipartibilia?) subglobosa, compressiuscula, caudiculâ brevi, glandulâ peltatâ. — Herba epiphyta, inter minores. Caules simplices. Folia disticha, linearia, acuta, carnosa, suprâ canaliculata. Pedunculi oppositifolii, solitarii, pauciflori. Flores sessiles virentes.

Character ex *Blume*.

1. *ADENONCOS virens*. *Blume l. c.*

Hab. in *Java*, supra arbores in sylvis montis Pantjar, *Blume*.

## CLVI. ŒCEOCLADES.

*Œceoclades*. *Lindl. in Bot. Reg. fol.* 1522.

Perianthium patens, v. ringens, v. connivens, subæquale, liberum, non secundum. Labellum liberum, sessile, cum columna articulatum, nudum v. basi bilamellatum, calcaratum; calcare curvo sæpè obconico, laminâ lobatâ cucullatâ, v. complicatâ, v. concavâ. Columna sæpè

elongata, semiteres. Anthera 2-ocularis. Pollinia 2, posticè sulcata, caudiculâ angustâ, glandulâ minutâ.—Epiphytæ, acaules v. caulescentes, nunc pseudobolbosæ. Folia coriacea, aut rarè membranacea, nunquam plicata. Flores sæpiùs minuti.

This genus differs from *Angræcum* in its usually shorter spur and longer column, and especially in its lobed lip which is almost always cucullate. The flowers are either ringent as in *Œceoclades maculata*, or spread flat as in many others. *Œceoclades* will probably comprehend all the *Eulophia*-like epiphytes that have not a second perianthium and a crest at the bottom of the labellum; it is very near *Eulophia*, from which its coriaceous, not plaited leaves, distinguish it among other things.

1. *ŒCEOCLADES tenera*.

*Œ. caulescens*, foliis oblongis carnosis emarginatis, spicis 3-4-floris horizontalibus foliis brevioribus, sepalo supremo erecto galeato lateralibus labello suppositis æquali, petalis galeâ parallelis conformibus: omnibus basi valde discretis, labello sepalis brevioribus trilobo cucullato laciniis lateralibus erectis emarginatis truncatis intermediâ carnosâ trilobâ planâ basi bicallosâ, calcare brevi incurvo.

Hab. in *Zeylona*, supra frutices in sylvis montanis, *Macrae*. (hab. s. sp. et v. ic. pict.)

Textura omnium partium, præsertim florum, laxè cellulosa. Labellum cum col. nec articulatum nec connatum. Columna brevissima, lateribus inflexis callosis. Pollinia 2, globosa, posticè biloba, caudiculâ lineari elongatâ, retinaculo deltoideo. Flores luteo-fulvi apicibus sanguineis, labelli laminâ albâ.

2. *ŒCEOCLADES paniculata*.

*Œ. caulescens*, foliis oblongis apice bilobis erosis, paniculis lateralibus foliis duplè longioribus, floribus minutis, sepalo supremo acuto galeato lateralibus brevioribus, petalis sepalo supremo minoribus acutis, labello sinuato cordato apice longè acuminato, calcare brevi ventricosus.

Hab. in *India Orientali*, ad Gualpara, *Hamilton*; in *Sylhet*, *Wallich*. (hab. s. sp. e *Mus. Angl. Ind.* et v. ic. pict.)

Flores extus discolores, quasi sphacelati, intus fulvi luteo marginati; labellum luteum.

3. *ŒCEOCLADES flexuosa*. *Lindl. in Wall. Cat. no. 7333*.

*Œ. subacaulis*, foliis lineari-loratis apice valdè obliquis subbilobis erosis, paniculis flexuosis erectis divaricatis, floribus minutis, sepalis petalisque obovato-oblongis, labello oblongo obtuso repando intus piloso, calcare conico incurvo laminâ longiore: dentibus marginis 2 acutis.

Hab. in *India Orientali*, in Deltæ Gangeticæ arbores, nec non ad ripas fluminis *Attran*, *Wallich*. (hab. s. sp. e *Mus. Angl. Ind.* et v. ic. pict.)

Petala et sepala intus flavo-rosea extus herbacea. Labellum album roseo pallidè fasciatum.

4. *ŒCEOCLADES parviflora*.

*Œ. "caule brevissimo, foliis sæpiùs 4 lineari-lanceolatis acutis sessilibus, scapo gracili simplici, floribus parvulis, laciniis calycis brevibus basi coalitis, labello trifido: calcare ascendente."* *A. R.*

*Angræcum parviflorum.* *Thouars. Orch. Afr. t. 60. Ach. Rich. Orch. Maurit. p. 71.*

Hab. in *Mauritio*, Thouars.

5. *ŒCEOCLADES* ? *gracilis*.

Œ. "caule brevissimo, foliis linearibus longissimis striatis apice bilobis basi subcarinatis striatis, floribus minimis in spica gracili longissima dispositis, calcare recurvo ovarii longitudine." *A. R.*

*Angræcum gracile.* *Thouars. Orch. Afr. t. 77. Ach. Richard. Orch. Maurit. p. 74.*

*Aerobion gracile.* *Spreng. Syst. 3. 717.*

Hab. in *Mauritio*, Thouars.

6. *ŒCEOCLADES* *pusilla.* *Lindl. in Wall. Cat. no. 7332.*

Œ. subacaulis, foliis obovato-oblongis apice æqualibus acutis bilobis racemis ascendentibus gracilibus brevioribus, floribus minutis, sepalis obovatis obtusis, petalis conformibus minoribus, labello hastato-triangulari, calcare infundibuliformi incurvo labello longiore.

Hab. supra ramulos arborum in sylvis *Sylhetensibus*, *Wallich. (hab. s. sp. e Mus. Angl. Ind.)*

An *Œ. Retzii* hujus loci, foliis delapsis?

7. *ŒCEOCLADES* *Retzii.*

Œ. "aphylla, subarticulata, fasciculata, cortici appressa, racemis simplicibus." *W.*

*Epidendrum pusillum.* *Retz. Obs. 6. 49.*

*Limodorum pusillum.* *Willd. Sp. Pl. 4. 126.*

Hab. in arboribus *Indiæ Orientalis*, *Retz.*

8. *ŒCEOCLADES* *funalis.*

Œ. "aphylla, radicans, pedunculo bifloro, limbo labelli bilobo, cornu longissimo subulato." *S.*

*Epidendrum funale.* *Swartz. Prodr. 126.*

*Limodorum funale.* *Id. Fl. Ind. Occ. 3. 1521. Willd. Sp. Pl. 4. 127.*

Hab. supra truncos vetustos in montibus *Jamaicæ*, *Swartz.*

Flores magni, albidi. Radices 2-3-pedales.

9. *ŒCEOCLADES* *falcata.*

Œ. caule simplici, foliis distichis linearibus canaliculatis acutis, floribus axillaribus solitariis longè pedunculatis, sepalis petalisque patentibus linearibus acutis, labello trilobo: lobo medio emarginato, calcare longissimo filiformi incurvo.

*Limodorum falcatum.* *Bot. Mag. 2097. nec Willd.*

*Angræcum falcatum.* *Lindl. in Coll. Bot. 15.*

Hab. in *China*.

The plant described by Thunberg in his *Flora Japonica*, under the name of *Orchis falcata*, and supposed to be this, has a scape and flowers in spikes; besides which it appears to be terrestrial. How then are we to consider it the same with this which has not one of these important characters?

10. *ŒCEOCLADES* *maculata.*

Œ. pseudobolbosa, foliis solitariis lanceolatis maculatis coriaceis, scapis radicalibus foliis longioribus, floribus ringentibus, labelli trilobi lobo intermedio rotundato emarginato, calcare recto obtuso laminâ basi breviter bilamellatâ brevior.



*Angræcum maculatum.* *Lindl. Coll. Bot. t. 15. Bot. Reg. 618.*

*Geodorum pictum.* *Link et Otto Abbild. t. 14.*

*Aerobon maculatum.* *Spreng. Syst. 3. 718.*

*Angræcum monophyllum.* *Ach. Rich. Orch. Maur. 66. t. 9.*

Hab. in *Brazilia*, nec non in *Africa æquinotiali*; in *Maurilio*, Commerson.  
(v. v. c.)

Flores albo et roseo picti. Pollinia 2, triangularia, collateralia, in utraque facie integerrima, caudiculâ brevi glandulâ viscidâ adhærente. Species omninò anomala; an *Cymbidio* potius referenda? an sui generis?

## CLVII. AERIDES.

*Aerides.* *Loureir. Cochinch. 525.*—*Dendrocolla.* *Blume Bijdr. 286. tabellen 67.*

Perianthium patens v. clausum. Sepala lateralialia, basi sæpiùs obliqua, cum ungue producto columnæ connata. Labellum cum ungue columnæ articulatam, saccatum v. calcaratum, trilobum: lobis lateralibus nanis; limbo cucullato, aut subulato, aut abbreviato-tumido, aut subfornicato. Columna in ovarium recumbens, brevis, aptera. Anthera bilocularis. Pollinia 2, posticè sulcata; caudiculâ latâ v. filiformi, glandulâ peltatâ subrotundâ.—Herbæ epiphytæ caulescentes. Caules subsimplices, radicanes. Folia disticha, coriacea, aut subcarnosa. Flores racemosi, v. spicati.

§ I. CUCULLA, *Blume. Spicæ bracteis carinatis sæpius carnosis instructæ. Labelli limbus cucullatus, rarius expansus.*

### 1. AERIDES arachnites.

A. "foliis lato-linearibus retusis, sepalis longiter acuminatis, labello intus appendice ligulato instructo."

*Dendrocolla arachnites.* *Blume l. c. 287.*

Hab. in *Java*, ad pedem montium *Salak* et *Seribu* provinciæ *Buitenzorg*, *Blume.* Floret omni tempore.

### 2. AERIDES testaceum.

A. foliis loratis acutis bilobis inter lobos cuspidatis, racemis strictis simplicibus multifloris foliis longioribus, sepalis petalisque obovato-oblongis obtusis, labelli infundibularis laciniis lateralibus erectis obtusis intermediâ lineari patente apice dilatatâ reniformi bilobâ dentatâ lineis duabus elevatis callosis in disco, calcare conico incurvo.

Hab. in *Zeylona*, supra arbores, *Macrae.* (hab. s. sp. et. ic. pict.)

Pedunculi maculati. Flores *Vandæ Roxburghi* paulo minores, pallidè testacei, maculâ violaceâ in medio labelli. Capsulæ clavatæ, hexagonæ.

### 3. AERIDES Wightianum. *Lindl. in Wall. Cat. no. 7320.*

A. foliis loratis apice obliquis obtusis bilobis inter lobos cuspidatis, racemis strictis simplicibus multifloris foliis longioribus, sepalis petalisque ovalibus anticis majoribus, labelli infundibularis laciniis lateralibus pediculi columnæ adnatis obtusis intermediâ subcuneata apice trilobâ rotundatâ: disco lineis pluribus elevatis crispis cristato, calcare brevi conico.

Hab. in *India Orientali*, prope *Madras*, *Wight.* (hab. s. sp. e *Mus. Angl. Ind.*)

Capsulæ clavatæ, alis sex brevibus.

4. *ÆRIDES odoratum*. *Lour. Fl. Cochinch.* 525.

A. foliis flaccidis apice obtusis obliquis, racemis pendulis multifloris foliis longioribus, labelli cucullati infundibularis laciniis lateralibus erectis cuneatis rotundatis intermediâ ovatâ acutâ inflexâ, calcare conico incurvo.

A. odoratum. *R. Brown in Hort. Kew.* 5. 212.

A. cornutum. *Roxb. Mus. Bot. Reg. t.* 1485.

Hab. supra arbores in *India Orientali*, prope Daccam et Noakote, in Sylhet, Chittagong et Moalmyne, *Wallich*; in sylvis *Chinæ* et *Cochinchinæ*, Loureiro.

Flores candidi, apicibus roseis, spectabiles, odoratissimi, ad cameras ornandas aptissimi.

5. *ÆRIDES affine*. *Wallich. Cat. no.* 7316.

A. foliis canaliculatis subrecurvis retusis mucronatis, racemis cylindraceis multifloris erectis foliis æqualibus, sepalis oblongis obtusis, petalis conformibus majioribus, labello cæteris majore ovato membranaceo obsolete trilobo, ungue saccato geniculato: calcare parvo cornuto laminæ supposito.

*Epidendrum geniculatum*. *Hamilt. Mus.*

Hab. in montes meridionales *Indiæ Orientalis*, pone Sheopore, in Sylhet et Napalia, *Wallich*. (*hab. s. sp. e Mus. Angl. Ind. et v. ic. pict.*)

Flores pulcherrimi, rosei, maculis quibusdam atrioribus.

6. *ÆRIDES crispum*. *Lindl. in Wall. Cat. no.* 7319.

A. foliis planis apice obtusis obliquis, racemis . . . . ., sepalis petalisque subæqualibus obtusis, labello cæteris majore ovato membranaceo margine crispo basi bicalloso: ungue recto; calcare parvo cornuto obtuso laminæ supposito.

Hab. in *India Orientali*, prope Courtallum, *Wallich*. (*hab. flores et folia spont. e Mus. Angl. Ind.*)

7. *ÆRIDES tæniale*.

A. subacaule, radicibus compressis repentibus foliaceis, foliis ovalibus acutis membranaceis radicibus multò brevioribus, racemis erectis 5-6-floris foliis brevioribus, sepalis petalisque ovalibus acutis anticis duplò latioribus basi labelli adnatis, labelli infundibularis laciniis lateralibus pedi columnæ adnatis erectis apice obtusis denticulatis intermediâ lineari-oblongâ integerrimâ acutâ, calcare brevi conico.

Hab. in *Napalia*, inter *Jungermannias*, *Wallich*. (*hab. s. sp. comm. cel. Rudge.*)

Flores inter minores. Labellum violaceum. Herba facie *Chiloschista usneoides*. Radices verosimiliter foliorum vices gerunt.

8. *ÆRIDES obtusum*.

A. "caule compresso, foliis lineari-lanceolatis emarginatis cum mucrone. intermedio sepalis obtusiusculis, labello interne villosa."

*Dendrocolla obtusa*. *Blume l. c.* 287.

Hab. in *Java*, sylvis altioribus Salak, *Blume*.

9. *ÆRIDES amplexicaule*.

A. "foliis cordatis amplexicaulibus, sepalis oblongis acutis, labello interne muricato."

*Dendrocolla amplexicaulis*. *Blume l. c.* 288.

Hab. in *Java*, in montanis Salak et in calcareis prope Kuripan, *Blume*.

May, 1833.

10. *AERIDES purpurascens*.

A. "caulibus compressiusculis, foliis lanceolatis emarginatis purpurascens, sepalis acutis."

*Dendrocolla purpurascens*. Blume l. c. 288.

Hab. in Java, sylvis humidis montium Pangurangu et Gede, Blume.

Flores flavi.

11. *AERIDES acuminatissimum*.

A. "caulibus subramosis, foliis lineari-lanceolatis emarginato-mucronatis (carnosis), sepalis et labelli limbo longiter acuminatis.

*Dendrocolla acuminatissima*. Blume l. c. 288.

Hab. in Java, sylvis montanis Pantjar, Blume.

§ II. *TUBERA* Blume. *Spice bracteis coalitis et scrobiculatis munitæ. Labelli limbus, callosus, abbreviatus.*

12. *AERIDES compressum*.

A. "foliis lineari-lanceolatis apice bicuspidatis (carnosis), pedunculo compresso bracteis nempe basi ad apicem carnosius carinatis connatis tecto."

*Dendrocolla compressa*. Blume l. c. 289.

Hab. in Java, sylvis humidioribus provinciarum Buitenzorg et Bantam, Blume.

13. *AERIDES tessellatum*. Wight in Wall. Cat. no. 7318.

A. foliis loratis apice truncatis rotundatis subæquilateris, racemis paucifloris horizontalibus foliis brevioribus, sepalis petalisque patentibus unguiculatis obovatis obtusis crispis tessellatis, labelli calcare recto conico laminâ ovatâ convexâ dentibus lateralibus erectis acuminatis columnæ longitudine.

*Epidendrum tessellatum*. Roxb. Corom. 1. t. 42.

*Cymbidium tessellatum*. Swartz. Nov. Act. Ups. 6. 75. Willd. Sp. Pl. 4. 102.

Hab. in India Orientali, supra truncos ramosque arborum in montes Circar, Roxburgh. (hab. s. sp. e Mus. Angl. Ind.)

Flores magni, viridi-lutei, speciosi.

14. *AERIDES cylindricum*. Lindl. in Wall. Cat. no. 7317.

A. foliis teretibus, racemis brevibus subbifloris, sepalis ovatis obtusis, petalis oblongis latioribus, labelli cucullati infundibularis laciniis lateralibus oblongis obtusis intermediæ carnosæ ovatæ obtusæ adnatis, calcare recto conico.

? *Epidendrum subulatum*. Retz. Obs. 6. 50.

? *Limodorum subulatum*. Willd. Sp. Pl. 4. 126.

Hab. in India Orientali, Wallich. Wight. (hab. s. sp. e Mus. Angl. Ind.)

15. *AERIDES teres*.

A. "foliis lato-linearibus basi angustioribus apice obtuso-emarginatis, pedunculo elongato tereti bracteis scrobiculatis tecto."

*Dendrocolla teres*. Blume l. c. 289.

Hab. in Java, montanis provinciæ Buitenzorg, Blume.

Sepala oblonga, obtusa, inferne angustiora. Labelli limbus abbreviatus, callosus. Foliis latioribus rigidioribus obtusissimis et pedunculo tereti ab *A. compresso* solummodo diversum. Bl.

16. *AERIDES pusillum*.

A. "foliis lato-lanceolatis, pedunculo versus apicem bracteis paucis obsesso, sepalis acutiusculis, labelli auriculis profundè bifidis."

*Dendrocolla appendiculata*. Blume l. c. 289.

Hab. in *Java*, ad arbores in monticulis calcareis prope Kuripan, Blume.

Planta pusilla. Flores miniati.

17. *AERIDES emarginatum*.

A. "foliis lineari-lanceolatis obliquè emarginatis, pedunculis confertis hirsutis versus apicem paucifloris, sepalis acutis, labelli auriculis emarginatis."

*Dendrocolla emarginata*. Blume l. c. 290.

Hab. in *Java*, sylvis montanis Pantjar et Meggamedong, Blume.

Flores flavi, labello candido intus maculis 2 flavescensibus.

18. *AERIDES pallidum*.

A. "foliis lineari-lanceolatis obliquè retusis, pedunculo superne bracteis paucis instructo, sepalis obtusis, labello extus cum tuberculo."

*Dendrocolla pallida*. Blume l. c. 290.

Hab. in *Java*, sylvis opacis Nusæ Kambangæ insulæ, Blume.

19. *AERIDES spurium*.

A. "caulibus elongato-clavatis superne tetragonis diphyllis (foliorum pri-  
vatione?), foliis lanceolatis, floribus e scrobiculis lateralibus caulis erum-  
pentibus."

*Dendrocolla spuria*. Blume l. c. 290.

Hab. in *Java*, vallibus montium Seribu, Blume.

An hujus generis et sectionis? Blume.

20. *AERIDES minimum*.

A. "caulibus simplicibus (vix semipollicaribus), foliis paucis lanceolatis acutiusculis, spicis brevibus ad apicem paucifloris, sepalis carinatis obtusiusculis, labelli limbo oblitterato."

*Dendrocolla minima*. Blume l. c. 290.

Hab. in *Java*, in montanis Pantjar, Blume.

§ III. *FORNICARIA*, Blume. *Spicæ supernè bracteis subulatis congestis præ-  
ditæ, labelli limbo abbreviato fornicato.*

21. *AERIDES angustifolium*.

A. "foliis carnosis lineari-lanceolatis canaliculatis obtusis emarginatis, pedunculis brevibus paucifloris."

*Dendrocolla angustifolia*. Blume l. c. 291.

Hab. in *Java*, in montosis Salak et Seribu, Blume.

22. *AERIDES subulatum*.

A. "foliis carnosis lineari-lanceolatis canaliculatis apice contractis subu-  
latis, pedunculis brevibus paucifloris."

*Dendrocolla subulata*. Blume l. c. 291.

Hab. in *Java*, in montosis Salak et Seribu, Blume.

A. *angustifolio* valdè affine, floribus etiam aurantiacis, Bl.

23. *AERIDES hystrix*.

A. "foliis linearibus basi angustioribus apice retusis, pedunculis elongatis apice congesto-multifloris."

*Dendrocolla hystrix*. *Blume l. c.* 291.

Hab. in *Java*, ad arbores circa Buitenzorg, Blume.

Bractæe subulatæ. Labelli limbus fornicatus, pubescens, internè cum appendiculo lamellato.

24. *AERIDES anceps*. -

A. "caulibus ancipitibus, foliis lanceolatis mucronulatis, pedunculis filiformibus apice paucifloris."

*Dendrocolla anceps*. *Blume l. c.* 292.

Hab. in *Java*, in elatis Salak, Blume.

Flores albido-flavescentes; labelli limbo fornicato, hirsuto.

§ IV. *PILEARIA*. *Labellum pileiforme; appendiculâ tabulari carnosâ intus a dorso projiciente.*

25. *AERIDES appendiculatum*. *Wall. Cat. no.* 7315.

A. foliis teretibus racemo flexuoso multò brevioribus, sepalis petalisque lineari-oblongis obtusis reflexis anticis duplò latioribus, columnâ elongatâ basi excavatâ pubescente, labelli pileati obtusi trilobi lobis omnibus brevibus intermedio complicato basi unicorni pubescente, callo magno tabulari a dorso calcaris projiciente.

Hab. in *Tavoy*, *Wallich. (hab. s. sp. e Mus. Angl. Ind.)*

An genus proprium? *Labellum omnino pileum conicum refert dorso intus appendiculatum, nec calcar adest ullum nisi apex pilei. Columna petalis ferè longitudine æqualis. Anthera et pollinia omnino Aeridis.*

§ V. *ORNITHOCHILUS*, *Wallich. Labelli lamina biloba, dilatata, unguiculata.*

26. *AERIDES difforme*. *Wall. Mss.*

A. acaule, foliis oblongis carnosis planis acutis apice levissimè obliquè bilobis, racemis strictis simplicibus foliorum longitudine, sepalis oblongis obtusis lateralibus majoribus obliquis, petalis linearibus obtusis, labelli cucullati laminâ maximâ bilobâ unguiculatâ: lobis rotundatis fimbriatis, calcare conico arcuato.

*Ornithochilus fuscus*. *Wallich. Ic.*

Hab. supra arboribus *Nepaliæ*, *Wallich. (v. ic.)*

Folia 6 poll. longa, 2½ lata. Flores fusco-lutei, purpureo vittati, odorati, inter minores. "Labellum posticum, nitidum, incumbens, ungue cum basi columnæ articulado; calcare cylindrico, assurgente, viridescente, laminâ brevior, fauce clausâ villis copiosis albis; lamina lata, retusa, reniformis cum cuspidulâ intermediâ, subunguiculata, margine laciniato-fimbriata, lobis divaricatis verticalibus; disco cristâ elongato-acutâ longitudinali. Columna recta, crassa, purpurascens, brevissima, apice acuta, posticè hamosa, antheram affigens. Anthera terminalis, obliqua, obtusa, posticè producta, bilocularis; pollinia duo, globosa, dura, posticè profundè biloba, membranâ propriâ apici columnæ affixa. Stigma obliquum, magnum, infra apicem columnæ." *Wall. Mss.*

## CLVIII. SCHŒNORCHIS.

*Schœnorchis. Blume Bijdr. 361. tabellen 23. Reinwardt in Bot. Zeit. 1825. 2. 4.*

Perianthium clausum. Sepala et petala labello multò minora. Labellum calcaratum, v. saccatum, basi columnæ accretum, limbo obscurè trilobo. Columna semiteres, aptera, basi bicornis, rostello cornuto. Anthera semibilocularis, cornuta. Pollinia 2, bipartibilia, globosa, caudiculâ filiformi, glandulâ parvâ hamatâ.—Herbæ epiphytæ, caulescentes. Caules subramosi, teretes. Folia linearia v. subulata, carnosa. Spicæ simplices v. ramosæ.

Character ex Blume.

§ I. *Labellum basi calcaratum; limbus patens. Columna mediocris. Bl.*

1. *SCHŒNORCHIS juncifolia. Blume l. c. Reinw. l. c.*

S. "foliis subulatis basi canaliculatis, spicis intrafoliaceis simplicibus, labelli calcare incurvo."

Hab. in *Java*, in sylvis montanis, Blume.

§ II. *Labellum basi saccatum; limbus erectus conicus. Columna brevissima. Bl.*

2. *SCHŒNORCHIS micrantha. Blume l. c. Reinw. l. c.*

S. "foliis subulatis basi canaliculatis, spicis simplicibus axillaribus."

Hab. in *Java*, in sylvis montanis Gede, Salak, &c. Blume.

3. *SCHŒNORCHIS paniculata. Blume l. c.*

S. "foliis linearibus canaliculatis, spicis paniculatis axillaribus."

Hab. in *Java*, circa Buitenzorg et in montanis Salak et Seribu, Blume.

## CLIX. AERANTHUS.

*Aeranthus. Lindl. in Bot. Reg. t. 817. (Aug. 1824.)*

Perianthium connivens. Sepala acuminata; lateralia majora, basi obliqua, ungui producto columnæ adnatæ. Petala paulò minora. Labellum integrum, cucullatum, calcaratum, petalis conforme, cum ungue columnæ articulatam. Columna brevis, in ovarium recumbens, apice alata. Anthera bilocularis. Pollinia 2, globosa, hinc perforata, caudiculâ nullâ, glandulis duabus!—Herbæ epiphytæ, caulescentes. Folia disticha, emarginata. Scapi radicales, squamosi, uniflori.

1. *AERANTHUS grandiflora. Lindl. l. c.*

A. pedunculis debilibus unifloris, columnæ pede longius producto, calcare abbreviato.

? *Dendrobium arachnitis. Thouars. Orch. Afr. t. 88.*

? *Aeranthus arachnitis. Lindl. l. c.*

Hab. in *Madagascaria*, Thouars, Forbes. (v. v. c.)

Subacaulis. Folia undulata, tenera, apice altè obliquè biloba. Pedunculi squamæ angustæ, sphacelatæ, acutæ, vaginantes. Sepala et petala viridia, apice lutescentia, labellum album apice lutescens; omnia acuminata apice canaliculata.

I formerly thought Du Petit Thouars's *Dendrobium arachnitis* distinct from this, but a better acquaintance with the habits of tropical Orchideæ has now induced me to cancel that supposed species.

2. *ÆRANTHUS* sesquipedalis. *Lindl. l. c.*

*A. pedunculis rigidis bifloris, calcare longissimo filiformi.*

*Angræcum sesquipedale. Thouars. Orch. Afr. tt. 66 et 67.*

*Hab. in Madagascaria, Thouars.*

*Flores maximi in genere, albi.*

## CLX. CRYPTOPUS.

*Cryptopus. Lindl. in Bot. Reg. 817. (Aug. 1824).—Beclardia. Ach. Rich. Orch. Maurit. 78. (1828).*

*Perianthium explanatum. Sepala libera, spatulata, æqualia. Petala paulo majora, unguiculata, lobata. Labellum calcaratum, basi columnæ connatum, 4-partitum. Columna erecta, brevis, teres. Anthera 2-locularis. Pollinia 2, obovata, posticè sulcata, caudiculis 2, apice excavatis, glandulis 2 dimidiatis villosis.—Herba epiphyta, caulescens. Folia disticha, coriacea. Paniculæ multifloræ, laterales. Flores speciosi.*

At the time when I first distinguished this genus I knew it only from the figures and account of Du Petit Thouars; I consequently took his characters upon trust. At a subsequent period having procured the plant from Mr. Prescott, I found that the pollen masses and the caudicula were not as Du Petit Thouars had represented them, but as I have now described them. At the very period of sending this to press Dr. Hooker's excellent Botanical Miscellany has reached me, in which I have the satisfaction to find nearly the same structure represented as I had sketched in my herbarium and added to my notes some years since.

1. *CRYPTOPUS* elata. *Lindl. l. c. Hooker in Bot. Misc. n. s. 1. p. 45. t. 115.*

*Angræcum elatum. Thouars. Orch. tt. 79. 80.*

*Beclardia alata. A. Rich. Orch. Maur. p. 78. t. 11. f. 3.*

*Limodorum dipterum. Tausch. in Sieber. Herb. Maur. no. 43.*

*Hab. in insulis Madagascaria, Mauritio, Borbonia, Thouars, Sieber. (hab. s. sp. comm. cel. Prescott.)*

## CLXI. OEONIA.

*Oeonia. Lindl. in Bot. Reg. 817. (Aug. 1824.)*

*Perianthium explanatum, petalis sepalisque subæqualibus, liberis. Label- lum sessile, cucullatum, 3-lobum, horizontale, calcaratum. Columna nana, erecta. Anthera bilocularis. Pollinia 2, posticè 2-loba, caudiculâ nullâ, glandulis duabus!—Herbæ epiphytæ, caulescentes. Folia coriacea, disticha. Spicæ oppositifoliæ, multifloræ. Flores speciosi.*

*Character ex Thouarsio et Ach. Richardio.*

1. *OEONIA* Auberti. *Lindl. l. c.*

*Æ. longè caulescens, foliis ovalibus acutis, labello cucullato cuneato bilobo cuspidè intermedio obsolete, calcare brevi conico.*

*Epidendrum volucre. Thouars. Orch. t. 81.*

*Hab. in Madagascaria, Thouars.*

2. *ÆONIA macrostachya*.

Æ. foliis loratis canaliculatis obtusis obliquè bilobis, labello cucullato cuneato sublacero bilobo cuspidè intermedio obsoleto, calcare conico medio constricto.

*Epidendrum macrostachys*. *Thouars. Orch. t. 83.*

*Beclardia macrostachya*. *A. Rich. Orch. Mauritt. p. 79. t. 11. f. 2.*

Hab. in *Borbonia* et *Mauritio*, Thouars, Neraud.

3. *ÆONIA brachystachya*.

Æ. subacaulis, foliis loratis apice obtusis leviter obliquè emarginatis, racemo simplici paucifloro.

*Epidendrum brachystachyum*. *Thouars. Orch. t. 84.*

*Beclardia brachystachya*. *A. Richard. Orch. Maur. p. 80.*

Hab. in *Mauritio*, Thouars.

## CLXII. ANGRÆCUM.

*Angræcum*. *Pet. Thouars Orch. Afr. passim.*—*Aerobion*. *Spreng. Syst. 3. 716.*

*Perianthium patens*. Sepala et petala subæqualia, libera. Labellum sessile, cum basi columnæ continuum, carnosum, indivisum, petalis multò latius; calcare recto cornuto, sæpidis subcylindræo, perianthio multò longiore, rarè obconico. Columna nana, subteres, rarè elongata, semiteres. Anthera 2-locularis, truncata. Pollinia 2, bipartibilia, caudiculâ brevi angustâ, glandulâ triangulari.—*Epiphytæ*, caulescentes. Folia coriacea, ligulata, apice obliqua. Flores solitarii v. racemosi, albi, nunc citrini, v. herbacei.

I am very slightly acquainted with the species of this genus, which requires a careful revision by some one in possession of the requisite materials. As it is now limited, it seems to be perfectly natural; with the exception of the American species which perhaps do not belong to it.

1. *ANGRÆCUM eburneum*. *Thouars. Orch. Afr. t. 65.*

A. caule simplici, foliis coriaceis lucidis apice obliquis 7-striatis, spicis multifloris secundis, labello cordato subrotundo cuspidato basi jugo elevato cristato, calcare sepalo supremo parallelo et dimidio longiore, ovario scabro.

*Limodorum eburneum*. "*Bory Voyage 1. 359. t. 19.*" *Willd. Sp. Pl. 4. 125.*

*Angræcum eburneum*. *Ach. Rich. Orch. Maur. p. 71. Lindl. in Bot. Reg. t. 1522.*

Hab. in insulis *Borbonia*, Thouars *Madagascaria*, *Forbes*. (v. v. c.)

2. *ANGRÆCUM superbum*. *Thouars. Orch. Afr. tt. 62, 63, 64.*

*Aerobion superbum*. *Spreng. l. c.*

Hab. in *Madagascaria*, Thouars.

Mera videtur varietas præcedentis, labello magis quadrato, nec aliter quantum video, diversa.

3. *ANGRÆCUM crassum*. *Thouars. Orch. Afr. tt. 70 et 71.*

A. foliis loratis apice obtusis obliquè bilobis, racemis secundis horizontalibus, sepalis petalisque minoribus acutis, labello ovato, calcare pendulo ovario brevior.

*Aerobion crassum*. *Spreng. l. c.*

Hab. in *Madagascaria*, Thouars.



4. *ANGRÆCUM* palmiforme. *Thouars. Orch. Afr. tt. 68, 69.*

A. "caule erecto tereti basi nudo, foliis caulem coronantibus elliptico-oblongis bilobis obtusis, floribus magnis, laciniis patulis, labello concavo lanceolato acutissimo, calcare ascendente brevissimo." *Ach. Rich. Orch. Maur. 72. t. 10. no. 1.*

*Aerobion* palmiforme. *Spreng. l. c.*

Hab. in insula *Borbonia*, *Thouars.*

Caulis 2-pedalis. Flores albi.

5. *ANGRÆCUM* gladiifolium. *Thouars. Orch. Afr. t. 53.*

A. "foliis lanceolatis acutis distantibus, labello lanceolato acuto plano, calcare pedunculo subtriunciali paulò longiore." *Ach. Rich. Orch. Maur. p. 69.*

*Orchis Mauritiana.* *Poir. Dict. 4. 601. see A. Rich.*

*Aerobion* gladiifolium. *Spreng. l. c.*

Hab. in *Borbonia* et *Mauritio*, *Thouars*, *Commerson*, &c. (*hab. s. sp. comm. cel. Bontou.*)

6. *ANGRÆCUM* fragrans. *Thouars. Orch. Afr. t. 54. Ach. Rich. l. c. 69.*

A. foliis loratis angustis obtusis obliquè bilobis, petalis angustissimis decurvis, labello ovali-lanceolato, calcare filiformi pendulo pedunculo dimidio brevior.

*Aerobion* fragrans. *Spreng. l. c.*

β *A. recurvum.* *Thouars. l. c. t. 56.*

*A. rectum.* *Idem t. 55. Ach. Rich. Orch. Maur. 70.*

*Aerobion recurvum et rectum.* *Spreng. l. c.*

Hab. in *Borbonia*, *Thouars.*

Folia loco *Thæ* *Borboniæ* indigenis utuntur, sub nomine *faam* seu *fahen*. *Ach. Rich. A. recurvum* calcare longiore, foliisque longioribus tantum differre videtur; verosimiliter mera est varietas.

7. *ANGRÆCUM* filicornu. *Thouars. Orch. Afr. t. 52. Ach. Rich. l. c. 68.*

A. foliis linearibus obtusis emarginatis, sepalis petalisque ovato-lanceolatis patentibus, labello ovato-lanceolato, calcare longissimo filiformi.

*Aerobion* filicornu. *Spreng. l. c.*

Hab. in *Borbonia*, *Thouars.*

8. *ANGRÆCUM* expansum. *Thouars. Orch. Afr. t. 57. Ach. Rich. l. c. 70.*

A. foliis lineari-loratis obliquè bilobis, sepalis petalisque patentissimis lineari-lanceolatis acuminatis, labello ovato acuminato, calcare filiformi ascendente triplò longiore.

*Aerobion* expansum. *Spreng. l. c.*

Hab. in *Mauritio* et *Borbonia*, *Thouars.*

9. *ANGRÆCUM* implicatum. *Thouars. Orch. Afr. t. 58.*

A. foliis brevibus oblongis obtusis obliquè bilobis, sepalo supremo labelloque ovatis acuminatis cæteris partibus paulò majoribus, calcare longissimo filiformi.

*Aerobion* implicatum. *Spreng. l. c.*

Hab. in *Madagascaria*, *Thouars.*

† 10. *ANGRÆCUM* *carpophorum*. *Thouars. Orch. Afr. t. 76.*

Hab. in *Mauritio*, Thouars.

Subacaule. Folia lorata, obtusa, obliquè biloba. Racemi erecti, pauciflori. Flores parvi. Calcar filiforme, fructu 3-angulari et 3-costato nunc longius nunc brevis.

11. *ANGRÆCUM* *triquetrum*. *Thouars. Orch. Afr. t. 49. Ach. Rich. l. c. 67.*

A. subacaule, foliis lineari-loratis apice obtusis bilobis, pedunculis subradicalibus unifloris, sepalis petalisque angustis acuminatis, labello concavo acuto calcare dependente longiore, fructu obovato triquetro.

*Aerobion triquetrum. Spreng. l. c.*

Hab. in *Mauritio*, Thouars.

12. *ANGRÆCUM* *inapertum*. *Thouars. Orch. Afr. t. 50. Ach. Rich. l. c. 67.*

A. subacaule, foliis lineari-lanceolatis acuminatis, sepalis petalis labelloque acutis, calcare incurvo obtuso.

*Aerobion inapertum. Spreng. l. c.*

Hab. in *Mauritio* et *Borbonia*, Thouars.

13. *ANGRÆCUM* *cucullatum*. *Thouars. Orch. Afr. t. 48.*

A. "pusillum, foliis approximatis elliptico-angustis obtusis emarginatis, laciniis exterioribus calycis æqualibus patulis, labello cucullato subintegro orbiculato obtuso." *Ach. Rich. l. c. 67.*

*Aerobion cucullatum. Spreng. l. c.*

Hab. in *Mauritio* et *Borbonia*, Thouars.

Parva species, supra corticem arborum vegetans, calcare infundibulari obtuso labelloque magno orbiculato in genere insignis.—An potius *Æceocladeos* species?

14. *ANGRÆCUM* *pectinatum*. *Thouars. Orch. Afr. t. 51. Ach. Rich. l. c. 68. t. 10. n. 5.*

A. "caule repente, ramis adscendentibus foliosis, foliis numerosis lineari-oblongis distichis approximatis carnosius obtusis, floribus axillaribus solitariis subsessilibus, sepalis labelloque patentibus oblongis (obtusis) subæqualibus, cornu rectiusculo ovario brevior." *Hooker. in Bot. Misc. n. s. 1. 47. t. 116.*

*Aerobion pectinatum. Spreng. l. c.*

Hab. in *Mauritio* et *Borbonia*, Thouars, Boier, aliique. (*hab. s. sp. comm. cel. Hooker.*)

15. *ANGRÆCUM* *caulescens*. *Thouars. Orch. Afr. t. 75. Ach. Rich. l. c. 73. t. 10. no. 3.*

A. "caule brevi, foliis paucis lato-linearibus distichis coriaceis, pedunculis elongatis paucifloris, sepalis oblongo-ovatis patentibus subæqualibus, labello cochleato acuminatissimo (acuminato), cornu incurvato (clavato) ovarium contortum subæquante." *Hooker. in Bot. Misc. n. s. 1. 48. t. 117.*

*Aerobion caulescens. Spreng. l. c.*

Hab. in *Mauritio*, Thouars, Telfair. (*hab. s. sp. comm. cel. Hooker.*)

16. *ANGRÆCUM* *multiflorum*. *Thouars. Orch. Afr. t. 74. Ach. Rich. l. c. 73*

A. caulescens, ramulosum, foliis brevibus loratis obtusis obliquè bilobis  
May, 1833.

racemis subcorymbosis axillaribus foliis brevioribus, sepalis ovatis acutis, petalis conformibus minoribus, labello ovato acuto calcare horizontali incurvo obtuso æquali.

*Aerobion multiflorum*. Spreng. l. c.

Hab. in *Borbonia*, Thouars.

17. *ANGRÆCUM calceolum*. Thouars. *Orch. Afr. t.* 78. *Ach. Rich. l. c.* 75. *t.* 10. n. 4.

A. subacaule, foliis loratis obtusis bilobis valdè obliquis, floribus paniculatis, sepalis petalisque acuminatissimis, labello concavo acuminato calcare recto clavato horizontali duplò brevior.

*Aerobion calceolum*. Spreng. l. c.

Hab. in *Borbonia*, Commerson, *Mauritio*, Thouars.

18. *ANGRÆCUM capense*.

A. foliis radicalibus equitantibus subensiformibus obtusiusculis digitalibus, scapis flexuosis erectis digitalibus spithamæisve, floribus secundis spicatis, sepalis lanceolatis apice recurvis lateralibus hinc obtusè unidentatis, petalis brevioribus et angustioribus, labello lanceolato acuto basi bicaloso, calcare filiformi obtuso pollicari.

*Epidendrum capense*. Linn. suppl. 407.

*Limodorum longicornu*. Swartz. in *Schrud. Diar.* 1799. p. 230. *Willd. Sp. Pl.* 4. 125. *Thunb. Flora Cap.* 1. 73.

Hab. ad *Cap. B. Spei*, in truncos arborum, Thunberg.

Char. ex Thunb.; nusquam inveni.

19. *ANGRÆCUM filiforme*.

A. "aphyllum, radicans, pedunculis subtrifloris, labello ovato, cornu brevissimo apice capitato." S.

*Epidendrum filiforme*. Swartz. *Prodr.* 126.

*Limodorum filiforme*. Swartz. *Fl. Ind. Oct.* 3, 1523. *Willd. Sp. Pl.* 4. 127.

Hab. in arborum ramos *Hispaniolæ*, Swartz.

Flores minuti, sordidè lutei.

### CLXIII. AGROSTOPHYLLUM.

*Agrostophyllum*. Blume *Bijdr.* 368. tabellen 53.

*Perianthium explanatum*. Sepala lata, æqualia, lateralibus labello suppositis. Petala linearia. Labellum cum basi columnæ connatum, saccatum, medio constrictum, limbo truncato indiviso. Columna semiteres, erecta. Anthera 2-locularis: loculis bipartitis. Pollinia 8, elongata, cuneata, sessilia.—Epiphyta, caulescens. Folia linearia, acuminata. Flores capitati, terminales, bracteis paleaceis cincti.

Character ex Blume.

1. *AGROSTOPHYLLUM Javanicum*. Blume l. c.

Hab. in *Java*, in sylvis montanis provinciarum *Buitenzorg* et *Bantam*, Blume.

## CLXIV. CALANTHE.

*Calanthe*. *R. Brown in Bot. Reg.* 578. *abœque charact.* (Oct. 1821).—Centrosis. *Thouars. Orch. Afr.*—*Amblyglottis*. *Blume Bijdr.* 370. *tabellen* 64.

Perianthium explanatum, liberum, v. sepalis lateralibus labello paullulùm adnatis, subœquale. Labellum cum columna connatum, lobatum v. integrum, calcaratum v. muticum, disco lamellatum v. tuberculatum. Columna brevis, rostello sæpius rostrato. Pollinia 8, basi valdè attenuata, quaternatim glandulæ bipartibili adhærentia.—Terrestres, scapis erectis multifloris. Folia lata, plicata. Flores albi, aut lilacini, rarò lutei.

1. *CALANTHE veratrifolia*. *R. Br. in Bot. Reg.* t. 720.

C. scapo stricto foliis oblongis acutis longiore, bracteis oblongis concavis, racemis densis multifloris, labello 4-lobo basi sulcato et glanduloso, calcare filiformi pendulo labello paulò longiore.

Flos triplicatus. *Rumph. Amb.* 6. t. 52. f. 2.

*Orchis triplicata*. *Willmet. in Ust. Ann.* 18. p. 52.

*Limodorum veratrifolium*. *Willd. Sp. Pl.* 4. 122.

? *Amblyglottis flava*. *Blume Bijdr.* 370. t. 64.

Hab. in insulis *Archipelagi Indici*; *Java*, *Blume*, *Zeylona*, *Macrae*. (*hab. s. sp. et v. v. c.*)

Flores nivei. Varietatem habeo e *Zeylona*, triplo minorem, sepalis conniventibus, labello olivaceo medio sanguineo, et bracteis minoribus. Nescio an diversa sit species.

2. *CALANTHE purpurea*.

C. scapo erecto foliis latis oblongis petiolatis acuminatis longiore, racemis laxis multifloris, labelli trilobi lobis lateralibus nanis rotundatis patentibus intermedio angusto cuneato divergenti-bilobo, calcare ovario vix brevior.

Hab. in *Zeylona*, in sylvis *Peradeniæ*, *Macrae*. (*hab. s. sp. et v. ic. pict.*)

Flores pallidè purpurei; labello apice atropurpureo.

An mera varietas *C. masuca*? v. *C. veratrifoliæ*?

3. *CALANTHE masuca*. *Lindl. in Wall. Cat. no.* 7337.

C. scapo erecto foliis latis oblongis petiolatis acuminatis longiore, racemis laxis multifloris, labello trilobo basi bicristato: lobis lateralibus intermedio retuso transverso appressis, calcare pendulo clavato ovario pubescente duplo longiore.

*Zeduba masuca*. *Hamilt. Mas.*

*Bletia masuca*. *Don. Prodr. Nep.* 30.

? *Amblyglottis veratrifolia*. *Blume Bijdr.* l. c.

Hab. in *Napalia*, *Wallich*, *Hamilton*; *Zeylona*, *Macrae*; *Java*? *Blume*. (*hab. s. sp. et v. ic. pict.*)

Flores pallidè cæruleo-purpurascens. Calcar unisulcatum.

4. *CALANTHE emarginata*.

C. "foliis lato-lanceolatis, spica erecta pubente, labello basi calloso, limbo trilobo, lobo medio emarginato-spatulato, lateralibus minutis, calcare lineari compressiusculo ovarium æquante."

*Amblyglottis emarginata*. *Blume l. c.* 370.

Hab. in *Java*, in sylvis primævis montis Gede, Blume.

Flores magni, violacei, callis labelli aurantiaci.

5. *CALANTHE vestita*. Wall. Cat. no. 7345.

C. molliter villosa, scapis laxis multifloris, pedicellis filiformibus flexuosis, labelli lamina trilobâ: lobis lateralibus oblongis obtusis intermedio cuneato divergentibilobo inappendiculato, calcare filiformi inflexo labello brevior.

Hab. in *Tavoy*, Wallich. (hab. s. sp. e Mus. Angl. Ind.)

Scapus pedalis et ultra. Flores maximi generis.

6. *CALANTHE sylvatica*.

C. scapo stricto foliis duplè longiore, racemo laxo multifloro, labello basi cordato auriculato trilobo ore glanduloso lobo medio cuneato dilatato emarginato apiculato plano subconcavo, calcare arcuato ovario brevior.

*Centrosis sylvatica*. Thouars. *Orch. Afr. it.* 35. 36.

Hab. in *Mauritio* et *Borbonia*, Thouars, Bouton, Sieber. (hab. s. sp. comm. cel. Bouton.)

Flores magni purpurascens.

7. *CALANTHE plantaginea*. Lindl. in Wall. Cat. no. 7346.

C. scapo erecto basi laxè et altè vaginato foliis subæquali, foliis petiolatis ovali-oblongis acutis, labello trilobo: lobis obovatis subæqualibus intermedio basi sulcato, calcare filiformi horizontali apice bidentato, ovario pubescente.

Hab. in *Napalia* et *Kamaon*, Wallich. (hab. s. sp. e Mus. Angl. Ind.)

Flores pallidè lilacini.

8. *CALANTHE speciosa*.

C. "foliis lato-lanceolatis, spica erecta, sepalis interioribus rhomboideis, labello intus bicristato, limbo subtrilobo, lobo medio ovato emarginato cum mucrone, calcare clavato recto ovario brevior."

*Amblyglottis speciosa*. Blume 371.

Hab. in *Java*, in sylvis obscuris montanis provinciarum Bantam et Buitenzorg, Blume.

Flores aurantiaci.

9. *CALANTHE pulchra*.

C. "foliis oblongo-lanceolatis, spica erecta, labello basi bituberculato, limbo semitrilobo, lobo medio ovato acuto, calcare subulato arcuato ovarium æquante."

*Amblyglottis pulchra*. Blume 371.

Hab. in *Java*, in sylvis montium Seribu, Blume.

Flores pallidè aurantiaci.

10. *CALANTHE densiflora*. Lindl. in Wall. Cat. no. 7344.

C. scapo laxè vaginato foliis multò brevior, racemis densis multifloris subcorymbosis, labello obovato obtuso bilobo? cum columna elongata parum connato, calcare longo recto pendulo apice clavato.

Hab. in montes *Sylhet*, Wallich. (hab. s. sp. e Mus. Angl. Ind.)

Folia sesquipedalia et ultra. Clinandrium marginatum. Flores lutei.

11. *CALANTHE clavata*. *Lindl. in Wall. Cat. no. 7343.*

C. scapo foliis brevior, racemo congesto cernuo longè bracteato, labello suborbiculato mucronato integerrimo basi bicalloso, calcare clavato sulcato recto.

Hab. in *Sylhet, Wallich. (hab. s. sp. e Mus. Angl. Ind.)*

Folia angusta, cum caule bipedalia.

12. *CALANTHE angustifolia*.

C. "foliis lineari-lanceolatis cuspidatis, spica radicali, limbo emarginato undulato, calcare obtuso ovarium æquante."

*Amblyglottis angustifolia. Blume 369.*

Hab. in *Java*, in umbrosis montium provinciæ Buitenzorg, Blume.

Flores albid, labelli limbo intus sulphureo.

13. *CALANTHE curculigoides*. *Wall. Cat. no. 7340.*

C. scapo crasso foliis duplè brevior, racemo denso multifloro, labello ovatoacuminato indiviso basi undulato, calcare gracili acuto apice incurvo.

Hab. in *Penang et Sincapur, Wallich. (hab. s. sp. e Mus. Angl. Ind.)*

Folia bipedalia. Scapus pedalis. Flores inter minores.

14. *CALANTHE striata*. *R. Br. in Bot. Reg. 578.*

C. labello trilobo subbicostato basi angustato: lobis lateralibus falcatis truncatis intermedio lineari cuneato emarginato, calcare brevi conico.

*Limodorum striatum. Banks Ic. Kæmpf. t. 2. Swarts. Nov. Act. Ups. 6. p. 79. Willd. Sp. Pl. 4. 123.*

Hab. in *Japonia, Kæmpfer.*

Differt a *Limodoro striato Thunb. Jap. sec. Thunb. in Act. Soc. Linn. 2. 327.*

15. *CALANTHE abbreviata*.

C. "foliis lanceolatis, spica erecta, labello basi cum tuberculo hirsuto, limbi trifidi lobo medio semibifido, calcare obtuso minimo."

*Amblyglottis abbreviata. Blume 371.*

Hab. in *Java*, circa catarractas fluvii Tjikundul in montanis Gede, Blume.

Flores albi.

16. *CALANTHE brevicornu*. *Lindl. in Wall. Cat. no. 7338.*

C. racemis secundis, labelli laminâ trilobâ: lobis lateralibus ovatis acutis intermedio cuneato bilobo lamellis 2 petaloideis in disco, calcare brevissimo, ovario pubescente.

Hab. in *Napalia, Wallich. (hab. s. sp. e Mus. Angl. Ind.)*

Scapus spithamæus, foliis subæqualis. Flores lateritio-rosei albo vittati.

17. *CALANTHE gracilis*. *Lindl. in Wall. Cat. no. 7341.*

C. scapis gracilibus multifloris basi altè vaginatis, labello basi saccato trilobo bilamellato: lobis lateralibus acutis abbreviatis intermedio subrotundo crispo indiviso.

Hab. in montes *Sylhet, Wallich. (hab. s. sp. e Mus. Angl. Ind.)*

Folia angusta, cum caule ultra pedem longa. Scapus paulò brevior. Flores parvi. Ovarium et basis sepalorum pubescentes.

18. *CALANTHE tricarinata*. Lindl. in Wall. Cat. no. 7339.

C. foliis oblongis scapo stricto laxè racemoso multò brevioribus, labello ecalcarato trilobo: lobis lateralibus oblongis obtusis nanis intermedio obovato crispo lamellis tribus petaloideis crenulatis in disco.

Hab. in *Napalia*, Wallich. (hab. s. sp. e Mus. Angl. Ind.)

Scapus ferè sesquipedalis.

19. *CALANTHE puberula*. Lindl. in Wall. Cat. no. 7342.

C. scapo foliis æquali laxè racemoso, bracteis lineari-lanceolatis ovario longioribus, sepalis ovatis lateralibus obliquis, petalis linearibus, labelli hastati inappendiculati ecalcarati lobis lateralibus subfalcatis intermedio lanceolato.

Hab. in montes *Sylhet*, Wallich. (hab. s. sp. e Mus. Angl. Ind.)

Folia pedalia, angusta. Flores leviter pubescentes.

## CLXV. TIPULARIA.

Tipularia. Nutt. Gen. Amer. 2. 195.

Perianthium patens. Sepala obovata, petalis conformibus latiora. Label- lum nanum, liberum, trilobum, longè calcaratum. Columna marginata, erecta, labello æqualis. Anthera bilocularis. Pollinia 2, bipartita, cau- diculâ lineari, glandulâ parvâ transversâ.—Herba terrestris. Pseudo- bulbi cæspitiosi, monophylli. Folium plicatum. Flores racemosi, (ebracteati sec. Nuttall.)

1. *TIPULARIA discolor*. Nuttall. l. c.

Orchis discolor. Pursh Fl. Am. Septentr. 2. 586.

Hab. in pinetis sterilibus in *America Septentrionalis* provinciis australibus, Pursh, Nuttall. (v. s. sp. in herb. Lambert.)

Folium unicum, ovatum, petiolatum, plicato-nervosum, glabrum, subtùs purpurascens. Petiolus margine plicato-undulatus. Scapus pedalis, nudus, vagina una alterave instructus, teres, glaber. Flores laxè spi- cati, brevissime pedicellati, nutantes, tristi-seu ex viridi-purpurascens. Petala oblonga, acutiuscula, flexuosa. Labellum petalis longius, mar- gine subundatum. Cornu adscendens, filiforme, flexuosum, purpureum. Pursh.—N. B. Cel. Nuttall labellum integrum describit: sed certissimè trilobum est in exemplaribus Herb. Lambert; an 2 species hic confusæ?

## CLXVI. LIMATODES.

Limatodes. Blume Bijdr. 375. tabellen 62.

Perianthium erecto-patens, subæquale, liberum. Labellum liberum, in- divisum, calcaratum: limbo internè tumido. Columna erecta, semiteres. Anthera 2-locularis: loculis subquadrilocellatis. Pollinia 8, obovata, caudiculâ brevi filiformi, glandulâ minutâ.—Herba terrestris. Caules basi tumidi. Folia lato-lanceolata, nervosa, membranacea. Pedunculi laterales, solitarii, pauciflori. Flores albi.

Character ex Blume.

1. *LIMATODES pauciflora*. Blume l. c.

Hab. in *Java*, in sylvis opacis montis Salak, Blume.

## CLXVII. GLOMERA.

Glomera. Blume *Bijdr.* 372. tabellen 68.

Perianthium clausum. Sepala lateralia latiora, carinata, labello supposita. Petala angustiora. Labellum liberum, indivisum, saccatum, columnam amplexans. Columna brevis, carnosâ, versus apicem dilatata. Anthera truncata, bilocularis: loculis incompletè bilocellatis. Pollinia 8, ovata, compressa, in glandulam sessilia.——Epiphyta caulescens. Caules simplices, elongati, compressiusculi. Folia lineari-lanceolata, obliquè emarginata, coriacea, glabra. Flores densè capitati, terminales, paleis bracteati.

Character ex Blume.

1. *GLOMERA erythrosma*. Blume l. c.

Hab. in *Java*, in arbores excelsos provinciarum occidentalium, Blume.

## CLXVIII. THELASIS.

Thelasis. Blume *Bijdr.* 385. tabellen 75.

Perianthium clausum. Sepala basi connata. Petala libera minora. Labellum liberum, ecalcaratum, indivisum, concavum, columnâ parallelum. Columna semiteres, rostello elongato, cornuto. Anthera dorsalis, rostrata, bilocularis. Pollinia 8, subglobosa, caudiculâ longâ filiformi, glandulâ hamatâ.——Epiphytæ, sociales, glabræ. Folia subcarnosa, sæpius pseudobulbis imposita. Flores in scapo radicali spicati, sessiles.

Character ex Blume.

1. *THELASIS obtusa*. Blume 386.

T. "foliis e bulbis solitariis lato-linearibus obliquè retusis, spica elongata."

Hab. in *Java*, in arbores ad montem Pangoerangoe, Blume.

2. *THELASIS carinata*. Blume l. c.

T. "foliis distichis elongato-linearibus obliquè retusis infernè carinatis, spica elongata."

Hab. in *Java*, in sylvis Salak, Blume.

3. *THELASIS capitata*. Blume l. c.

T. "foliis in bulbos difformes lineari-lanceolatis obliquè retusis, floribus capitato-confertis demum laxè spicatis."

Hab. in *Java*, in truncos montium Salak, Pantjar, &c. Blume.



**NOTE.** The total number of Orchideous plants belonging to the Tribe Vandeæ is as follows ;

Described	477
Doubtful	10
	<hr/>
Total	487

**Their geographical arrangement is thus :**

Names of the Genera.	Europe.	Siberia and Northern Asia.	North America.	Northern India and Nipal.	Continent of India.	Ceylon.	Indian Archipelago.	China.	Japan.	New Holland.	South Sea Islands.	America within the tropics.	South America beyond the tropic.	South Africa.	Mauritius, &c.	Africa within the tropics.	North Africa.
73. Nanodes . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
73. Aspasia . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
74. Ornithidium . . . . .	.	.	.	.	.	.	1	.	.	.	.	1	.	.	.	.	.
75. Acriopsis . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
76. Trizeuxis . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
77. Ornithocephalus . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
78. Clirrhæa . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
79. Sarcocyllus . . . . .	.	.	.	.	.	.	.	.	.	1	.	1	.	.	.	.	.
80. Maxillaria . . . . .	.	.	.	.	.	.	.	.	.	.	.	40	.	.	.	.	.
81. Arpophyllum . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
82. Bifrenaria . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
83. Dicroptis . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
84. Govenia . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
85. Alamania . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
86. Psittacoglossum . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
87. Cycnoches . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
88. Myanthes . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
89. Catasetum . . . . .	.	.	.	.	.	.	.	.	.	.	.	7	.	.	.	.	.
90. Monachanthus . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
91. Stanhopea . . . . .	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.
92. Gongora . . . . .	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.
93. Coryanthes . . . . .	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.
94. Anguloa . . . . .	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.
95. Peristeria . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
96. Eucnemis . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
97. Cymbidium . . . . .	.	.	8	4	4	4	5	3	1	2	1	15	.	2	1	.	.
98. Acropera . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
99. Cremastra . . . . .	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
100. Grammatophyllum . . . . .	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.
101. Trichoceros . . . . .	.	.	.	.	.	.	.	.	.	.	.	3	.	.	.	.	.
102. Geodorum . . . . .	.	.	3	2	.	.	1	.	.	1	.	.	.	.	.	.	.
103. Sobralia . . . . .	.	.	.	.	.	.	.	.	.	.	.	6	.	.	.	.	.
104. Acanthophippium . . . . .	.	.	1	.	.	.	1	.	.	.	.	.	.	.	.	.	.
105. Doritis . . . . .	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
106. Chelonanthera . . . . .	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.
107. Acanthoglossum . . . . .	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
108. Sunpia . . . . .	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.
109. Calypso . . . . .	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
110. Eulophia . . . . .	.	.	6	5	5	5	2	.	.	.	.	1	.	6	3	5	.
111. Dipodium . . . . .	.	.	.	.	.	.	.	.	.	1	1	.	.	.	.	.	.
112. Galeandra . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	2	.
113. Zygopetalum . . . . .	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.

Names of the Genera.	Europe.	Siberia and Northern Asia.	North America.	Northern India and Nepal.	Continent of India.	Ceylon.	Indian Archipelago.	China.	Japan.	New Holland.	South Sea Islands.	America within the tropics.	South America beyond the tropics.	South Africa.	Mauritius, &c.	Africa within the tropics.	North Africa.
121. <i>Rodriguezia</i> . . . . .	.	.	.	.	.	.	.	.	.	.	.	5	.	.	.	.	.
122. <i>Macradenia</i> . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
123. <i>Cryptarrhena</i> . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
124. <i>Cultianzina</i> . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
125. <i>Oncidium</i> . . . . .	.	.	.	.	.	.	.	.	.	.	.	3	.	.	.	.	.
126. <i>Fernandezia</i> . . . . .	.	.	.	.	.	.	.	.	.	.	.	3	.	.	.	.	.
127. <i>Pachyphyllum</i> . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
128. <i>Dichaea</i> . . . . .	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
129. <i>Phymatidium</i> . . . . .	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.
130. <i>Cyrtorchilum</i> . . . . .	.	.	.	.	.	.	.	.	.	.	.	4	.	.	.	.	.
131. <i>Odontoglossum</i> . . . . .	.	.	.	.	.	.	.	.	.	.	.	5	.	.	.	.	.
132. <i>Brassia</i> . . . . .	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.
133. <i>Tetrapeltis</i> . . . . .	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
134. <i>Phalaenopsis</i> . . . . .	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
135. <i>Trichoglottis</i> . . . . .	.	.	.	.	.	.	3	.	.	.	.	.	.	.	.	.	.
136. <i>Teliopogon</i> . . . . .	.	.	.	.	.	.	2	1	.	.	.	2	.	.	.	.	.
137. <i>Vanda</i> . . . . .	.	.	3	4	1	2	3	1	.	.	.	.	.	.	.	.	.
138. <i>Renanthera</i> . . . . .	.	.	.	.	.	.	1	1	1	.	.	.	.	.	.	.	.
139. <i>Diplocentrum</i> . . . . .	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
140. <i>Microsaccus</i> . . . . .	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
141. <i>Camarotis</i> . . . . .	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
142. <i>Chiloschista</i> . . . . .	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
143. <i>Micropera</i> . . . . .	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
144. <i>Saccolabium</i> . . . . .	.	.	10	11	5	6	6	.	.	.	.	.	.	.	3	.	.
145. <i>Taniophyllum</i> . . . . .	.	.	.	.	.	4	4	.	.	.	.	.	.	.	.	.	.
146. <i>Cleisostoma</i> . . . . .	.	.	.	1	2	5	5	.	.	.	.	.	.	.	.	.	.
147. <i>Appendicula</i> . . . . .	.	.	.	.	.	18	1	.	.	.	.	.	.	.	.	.	.
148. <i>Cryptoglottis</i> . . . . .	.	.	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.
149. <i>Ceratostylis</i> . . . . .	.	.	.	.	.	6	2	.	.	.	.	.	.	.	.	.	.
150. <i>Ephippium</i> . . . . .	.	.	.	.	.	2	2	.	.	.	.	.	.	.	.	.	.
151. <i>Ceratochilus</i> . . . . .	.	.	.	1	.	1	1	.	.	.	.	.	.	.	.	.	.
152. <i>Echioglossum</i> . . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
153. <i>Sarcanthus</i> . . . . .	.	.	.	.	.	.	.	4	.	.	.	.	.	.	.	.	.
154. <i>Podochilus</i> . . . . .	.	.	1	.	3	4	4	.	.	.	.	.	.	.	.	.	.
155. <i>Adenoncos</i> . . . . .	.	.	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.
156. <i>Oecoclades</i> . . . . .	.	.	2	2	1	.	.	1	.	.	.	2	.	.	3	1	.
157. <i>Aerides</i> . . . . .	.	.	4	7	1	16	3	1	.	.	.	.	.	.	.	.	.
158. <i>Schomorchis</i> . . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
159. <i>Aeranthes</i> . . . . .	.	4	.	.	.	.	.	.	.	.	.	.	.	.	2	1	.
160. <i>Cryptopus</i> . . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	.	.
161. <i>Oeonia</i> . . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
162. <i>Angraecum</i> . . . . .	.	.	.	.	.	.	1	.	.	.	.	1	.	1	17	.	.
163. <i>Agrostophyllum</i> . . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
164. <i>Calanthe</i> . . . . .	.	.	8	1	3	8	8	.	1	.	.	.	.	.	1	.	.
165. <i>Tipularia</i> . . . . .	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
166. <i>Limnates</i> . . . . .	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
167. <i>Glomera</i> . . . . .	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
168. <i>Thelasis</i> . . . . .	.	.	.	.	.	3	.	.	.	.	.	.	.	.	.	.	.
Total	1	1	2	58	41	24	109	11	3	5	2	198	.	14	34	9	.



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